Access DB# 128413

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: _Michael Lewis_   Examiner #: _80191_   Date: _7/23/04_

Art Unit: _2655_   Phone Number _305 8732_   Serial Number: _09/852127_

Location: _8D50_   Results Format Preferred (circle): PAPER **DISK** E-MAIL

If more than one search is submitted, please prioritize searches in order of need.
****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _Audible Error Detector and Controllable Utilizing Channel_

Inventors (please provide full names): _Janne Vainio, Hanna J Mikkola, Jani Rotola-Pukkila_

Earliest Priority Filing Date: _June 7, 2000_

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

In a Communication system, channel quality is linked to the errors received by a decoder. This approach uses resynthesizing of the signal in a iterative way using accepted standard which vary with channel quality deficiency.

Good luck !

b.c.

****

STAFF USE ONLY

Searcher: _Carol Wong_

Searcher Phone #: _305-9729_

Searcher Location: _4B33/3C03_

Date Searcher Picked Up: _8-2_

Date Completed: _8-3-04_

Searcher Prep & Review Time: _____

Clerical Prep Time: _____

Online Time: _____

Type of Search	
NA Sequence (#)	_____
AA Sequence (#)	_____
Structure (#)	_____
Bibliographic	✓
Litigation	_____
Fulltext	_____
Patent Family	_____
Other	_____

Vendors and cost where applicable

STN _____

Dialog ✓ _____

Questel/Orbit _____

Dr.Link _____

Lexis/Nexis _____

Sequence Systems _____

WWW/Internet _____

Other (specify) _____

Set	Items	Description
S1	2217980	SIGNAL? ?
S2	39128	S1(3N)(MODIFY? OR MODIFIE? ? OR MODIFICATION? OR CHANG??? ? OR VARY??? ? OR VARIE? ? OR ADJUST?)
S3	33411	S1(3N)(READJUST? OR ADAPT??? ? OR ADAPTAB? OR ALTER OR ALTERS OR ALTERED OR ALTERING OR ALTERATION?)
S4	2717	S1(3N)(EDIT??? ? OR REVIS???? ? OR REDEFIN? OR REPROGRAM? - OR RECONFIGUR? OR ALTERR?)
S5	27	S1(3N)RE()(CONFIGUR? OR PROGRAM??? ? OR PROGRAMM? OR DEFINE? ? OR DEFINI?)
S6	24056	S1(3N)(RESYNTHESI? OR REPRODUC? OR REGENERAT? OR RECREAT? - OR REFORM? OR RECONSTRUCT?)
S7	12	S1(3N)RE()(SYNTHESIS? OR SYNTHESIZ? OR PRODUC????? ? OR FORM???? ? OR FORMATION?)
S8	15	S1(3N)RE()(GENERAT???? ? OR CREAT???? ? OR CONSTRUCT?)
S9	6448670	CHANNEL? ? OR LINE OR LINES OR CIRCUIT??? ? OR PATH? ? OR - PATHWAY? ?
S10	137139	S9(2N)(QUALITY OR STATE OR STATES OR CONDITION? ? OR STATUS? OR MODE OR MODES)
S11	15617718	STRINGEN? OR STANDARD? ? OR THRESHOLD? ? OR CONDITION? ? OR VALUE OR VALUES OR LEVEL? ? OR PROFILE? ? OR PATTERN? ?
S12	13209319	BOUND? ? OR RANGE OR RANGES OR CRITERIA? OR CRITERION? OR - NORM? ? OR MODEL? ? OR RULE OR RULES OR FORMULA?
S13	1457633	BASELINE? OR BASE()LINE? ? OR TEMPLATE? OR YARDSTICK? OR Y-

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S14    742542    S11:S13(3N)(MODIFY? OR MODIFIE? ? OR MODIFICATION? OR CHAN-
                 G??? ? OR VARY??? ? OR VARIE? ? OR ADJUST?)
S15    149268    S11:S13(3N)(READJUST? OR ADAPT??? ? OR ADAPTAB? OR ALTER OR
                 ALTERS OR ALTERED OR ALTERING OR ALTERATION?)
S16     67638    S11:S13(3N)(EDIT??? ? OR REVIS???? ? OR REDEFIN? OR REPROG-
                 RAM? OR RECONFIGUR? OR  ALTERR?)
S17       173    S11:S13(3N)RE()(CONFIGUR? OR PROGRAM??? ? OR PROGRAMM? OR -
                 DEFINE? ? OR DEFINI?)
S18      2930    S10(5N)(DEPEND? OR CORRELAT? OR LINK? OR INTERLINK? OR INT-
                 ERELAT? OR INTERRELAT?)
S19       862    S10(5N)(RELAT?? ? OR RELATING OR RELATION? OR CORELAT? OR -
                 CONTINGEN? OR PREDICAT? OR CIRCUMSCRIB?)
S20      3012    S10(5N)(BASE OR BASED OR BASING OR SUBJECT?)
S21      9360    S2:S8 AND S14:S17
S22       130    S21 AND S10
S23        58    S2:S8 AND S18:S20
S24        74    S2:S8 AND S14:S17(15N)S10
S25       122    S23:S24
S26        48    S25/2001:2004
S27        74    S25 NOT S26
S28        49    RD (unique items)
```

28/7/1   (Item 1 from file: 6)

2154357 NTIS Accession Number: ADA372117/XAB
  Spread Spectrum Interference Mitigation with Variable Processing Gain
  (Final technical rept. Feb-Nov 98)
  Saulnier, G. J. ; Ye, Z.
  Rensselaer Polytechnic Inst., Troy, NY.
  Corp. Source Codes: 024503000; 302100
  Report No.: AFRL-IF-RS-TR-1999-222
  Oct 1999   115p
  Languages: English
  Journal Announcement: USGRDR0009

  Designing a spread spectrum signal for the worst case channel conditions
can be wasteful of system resources such as bandwidth and network
throughput capacity. This report focuses on the performance of spread
spectrum system based on multi-carrier modulation, also known as Orthogonal
Frequency Division Multiplexing (OFDM), which provides variable processing
gain by adjusting the redundancy in the signal in response to the **channel
  conditions** . A signal structure **based** on OFDM is defined and a
technique for **adapting** the **signal** properties, including the data rate,
in response to channel conditions and/or transmission requirements, is
developed. Analytical and simulation results demonstrate that the signaling
format can maintain a desired error rate performance over a wide range of
channel conditions. The report also considers the impact of this variable
signaling scheme on the upper layers of the network and, in particular, the
data link layer. Classic throughput analysis for fixed and random access
schemes is extended for this proposed adaptive packet radio network. The
focus in on pure-ALOHA and non-persistent CSMA (NP-CSMA) systems. A large
improvement in throughput is demonstrated for the adaptive system, as

compared to a conventional fixed rate system, for various mobile user population profiles and radio propagation path loss models.

28/7/2   (Item 2 from file: 6)
DIALOG(R)File   6:NTIS

0627698 NTIS Accession Number: AD-484 008/8/XAB
  Adaptive Noise Minimizer
  (Final rept)
  Communication Systems Inc Paramus N J
  Corp. Source Codes: 092975
  Report No.: CSI-66-TR-1018; RADC-TR-66-179
  May 66   81p
  Journal Announcement: GRAI7714
  Distribution limitation now removed. Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
  NTIS Prices: PC A05/MF A01
  Contract No.: AF 30(602)-3803; AF-4519; 451908
  This report describes and evaluates equipment capable of adaptively modifying the modulation index of a troposcatter link to continuously optimize the receiver signal-to-noise ratio. An examination into the theory of noise in communications channels led to certain novel design objectives. Equipment was evolved to implement these concepts and explore possible modes of operation. Tests on the RADC Caribbean Test Bed showed that the sensing mode known as TAGGING was the most successful, with resultant digital error rates showing improvement factors varying from 2 to 10, **depending** on **path   conditions** . This program has shown that the Adaptive Modulation Index technique is a feasible and practical approach for improving the error rate in a tropo FDM/FM system. System performance can now be significantly improved without the need for resorting to costly and complex brute force methods. (Author)

28/7/3   (Item 3 from file: 6)
DIALOG(R)File   6:NTIS

0186005 NTIS Accession Number: AD-484 008/XAB
  Adaptive Noise Minimizer
  (Final rept)
  Communications and Systems Inc., Paramus, N.J.
  Corp. Source Codes: 403477
  Report No.: C/S-66-TR-1018; RADC-TR-66-179
  May 66   81p
  Journal Announcement: USGRDR6919
  Distribution Limitation now Removed.
  Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.
  NTIS Prices: PC A05/MF A01
  Contract No.: AF 30(602)-3803; AF-4519; 451908
  The report describes and evaluates equipment capable of adaptively modifying the modulation index of a troposcatter link to continuously optimize the receiver signal-to-noise ratio. An examination into the theory of noise in communications channels led to certain novel design objectives. Equipment was evolved to implement these concepts and explore possible

modes of operation. Tests on the RADC caribbean test bed showed that the sensing mode known as tagging was the most successful, with resultant digital error rates showing improvement factors varying from 2 to 10, **depending** on **path conditions** . This program has shown that the adaptive modulation index technique is a feasible and practical approach for improving the error rate in a Tropo FDM/FM system. System performance can now be significantly improved without the need for resorting to costly and complex brute force methods. (Author)

28/7/4   (Item 1 from file: 2)
DIALOG(R)File   2:INSPEC
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6946339   INSPEC Abstract Number: B2001-07-6120B-119
  Title: **Progressive source coding combined with regressive channel coding on varying channels**
  Author(s): Hagenauer, J.; Stockhammer, T.; Weiss, C.; Donner, A.
  Author Affiliation: Inst. for Commun. Technol., Tech. Univ. Munchen, Germany
  Journal: ITG-Fachbericht Conference Title: ITG-Fachber. (Germany)
no.159   p.123-30
  Publisher: VDE-Verlag,
  Publication Date: 2000 Country of Publication: Germany
  CODEN: ITGFEY ISSN: 0932-6022
  SICI: 0932-6022(2000)159L.123:PSCC;1-H
  Material Identity Number: G434-2001-002
  Conference Title: 3rd ITG Conference Source and Channel Coding
  Conference Sponsor: Informationstechnische Gesellschaft im VDE (ITG); IEEE Inf. Theory Soc. (IT); et al
  Conference Date: 17-19 Jan. 2000   Conference Location: Munich, Germany
  Language: English   Document Type: Conference Paper (PA); Journal Paper (JP)
  Treatment: Practical (P); Theoretical (T)
  Abstract: A channel coding system for heavily varying channels (mobile radio, Internet) unknown to the encoder is presented. It matches progressively coded sources (e.g., video, images, audio, speech) with convolutional codes (CCs) of very high memory applying regressive redundancy over the data frame of the source. The channel decoder with scalable complexity and delay employs modified sequential decoding. The decoder uses a new algorithm, the "far end error decoder (FEED)" which, in a change of paradigm, does not aim at low error rate, but rather tries to decode an error-free part from the beginning of the frame as far out as possible under the actual channel conditions. We determine the error-free region of the frame which means that for progressively coded sources we achieve the best reconstruction quality possible. The decoding method is self-adaptive to **varying** and unknown **channel conditions** (interference, fading, packet loss) and provides graceful degradation. Results with SPIHT coded images show performances better than previous known FEC schemes. Potentials for further improvements of this scheme are discussed. (16 Refs)
  Subfile: B
  Copyright 2001, IEE

28/7/5   (Item 2 from file: 2)
DIALOG(R)File   2:INSPEC
(c) 2004 Institution of Electrical Engineers. All rts. reserv.

6887239   INSPEC Abstract Number: B2001-05-6150E-019
  Title: **Simple blind beamforming algorithms based on power maximization for**

DSSS CDMA systems

Author(s): Kyungwhoon Cheun; Youhan Kim
Author Affiliation: Dept. of Electron. & Electr. Eng., Pohang Inst. of Sci. & Technol., South Korea
Conference Title: 10th International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC'99). Proceedings Part vol.2 p. 684-90 vol.2
Publisher: Osaka Univ, Odsaka, Japan
Publication Date: 1999 Country of Publication: Japan 3 vol. xxiii+1560 pp.
Material Identity Number: XX-2000-03072
Conference Title: Proceedings of PIMRC'99: International Symposium on Personal and Indoor Mobile Radio Communications
Conference Date: 12-15 Sept. 1999 Conference Location: Osaka, Japan
Language: English Document Type: Conference Paper (PA)
Treatment: Theoretical (T)

Abstract: Four very simple blind beamforming algorithms intended for use in direct-sequence spread-spectrum CDMA systems and based on maximization of the power of the beamformer output are derived. Three of them are signed versions of a base algorithm. Steady-state values of the norm of the beamformer output and the beamformer weight vector under noiseless conditions are derived which reveal some very interesting properties of the algorithms. The derived algorithms show very fast convergence rates and are extremely simple, and two of them do not require any multiplication operations `for weight updates. Also, the algorithms are shown to be quite insensitive to the particular selection of the involved step sizes, thus easing beamformer design in time- **varying channel conditions** . Extensive computer simulations have been performed to verify the usefulness of the algorithms. (12 Refs)
Subfile: B

28/7/6 (Item 3 from file: 2)

6868324 INSPEC Abstract Number: B2001-04-6135C-074, C2001-04-5260D-042
Title: Adaptive optimal intra-update for lossy video transmission
Author(s): Stuhlmuller, K.W.; Farber, N.; Girod, B.
Author Affiliation: Telecommun. Lab., Erlangen-Nurnberg Univ., Germany
Journal: Proceedings of the SPIE - The International Society for Optical Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA) vol.4067, pt.1-3 p.286-95
Publisher: SPIE-Int. Soc. Opt. Eng,
Publication Date: 2000 Country of Publication: USA
CODEN: PSISDG ISSN: 0277-786X
SICI: 0277-786X(2000)4067:1/3L.286:AOIU;1-Z
Material Identity Number: C574-2000-219
U.S. Copyright Clearance Center Code: 0277-786X/2000/$15.00
Conference Title: Visual Communications and Image Processing 2000
Conference Sponsor: SPIE; Univ. Western Australia; Inst.. Eng. Australia; Soc. Imaging Scu, & Technol.; IEEE
Conference Date: 20-23 June 2000 Conference Location: Perth, WA, Australia
Language: English Document Type: Conference Paper (PA); Journal Paper (JP)
Treatment: Theoretical (T); Experimental (X)
Abstract: An adaptive algorithm to adjust the intra-update rate of a video encoder is presented. As optimization criterion, the PSNR at the decoder after lossy transmission is used. Based on a model for the video

encoder and error propagation at the video decoder the optimal intra-rate can be calculated for a given transmission channel analytically. It is shown how the parameters of these models can be measured adaptively during encoding. Thus, the intra-rate can be **adjusted** to **changing channel conditions** and sequence statistics. It is shown that a practical robust system can be built with the presented algorithm. (8 Refs)
  Subfile: B C

 28/7/7   (Item 4 from file: 2)

6790519   INSPEC Abstract Number: B2001-02-6135C-030
  Title: Reliable video transmission over fading channels via channel state estimation
Author(s): Kumwilaisak, W.; Jong Won Kim; Kuo, C.-C.J.
  Author Affiliation: Dept. of Electr. Eng. Syst., Univ. of Southern California, Los Angeles, CA, USA
Abstract: Transmission of continuous media such as video over time-varying wireless communication channels can benefit from the use of adaptation techniques in both source and channel coding. An adaptive feedback-based wireless video transmission scheme is investigated in this research with special emphasis on feedback-based adaptation. To be more specific, an interactive adaptive transmission scheme is developed by letting the receiver estimate the channel state information and send it back to the transmitter. By utilizing the feedback information, the transmitter is capable of **adapting** the **level** of protection by **changing** the flexible RCPC (rate-compatible punctured convolutional) code ratio **depending** on the instantaneous **channel condition** . The wireless **channel** is modeled as a fading channel, where the long-term and short-term fading effects are modeled as the log-normal fading and the Rayleigh flat fading, respectively. Then, its state (mainly the long-term fading portion) is tracked and predicted by using an adaptive LMS (least mean squares) algorithm. By utilizing the delayed feedback on the channel condition, the adaptation performance of the proposed scheme is first evaluated in terms of the error probability and the throughput. It is then extended to incorporate variable size packets of ITU-T H.263+ video with the error resilience option. Finally, the end-to-end performance of wireless video transmission is compared against several non-adaptive protection schemes. (11 Refs)
  Subfile: B

6345236   INSPEC Abstract Number: B1999-10-6150-017
  Title: A wideband radio channel model for simulation of chaotic communication systems
  Author(s): Ruttik, K.; Honkanen, P.; Hall, M.; Korhonen, T.; Porra, V.
  Author Affiliation: Inst. of Radio Commun., Helsinki Univ. of Technol., Espoo, Finland
  Conference Title: ECCTD '97. Proceedings of the 1997 European Conference on Circuit Theory and Design   Part vol.1   p.302-5 vol.1
  Publisher: Tech. Univ. Budapest, Budapest, Hungary
  Publication Date: 1997 Country of Publication: Hungary   3 vol. (xx+xxi+xx+1572) pp.
  Material Identity Number: XX-1997-02982
  Conference Title: Proceedings of 1997 European Conference on Circuit Theory and Design (ECCTD'97)
  Conference Sponsor: IEEE Circuit & Syst. Soc.; Tech. Univ. Budapest; Hungarian Acad. Sci.; et al
  Conference Date: 31 Aug.-3 Sept. 1997   Conference Location: Budapest, Hungary
  Language: English   Document Type: Conference Paper (PA)
  Treatment: Theoretical (T)
  Abstract: A general purpose wideband radio channel model implemented in MATLAB has been designed specifically for testing the performance of wideband chaotic communication systems utilising a radio interface. The theoretical basis of the model is presented in the paper, as well as a short description of the MATLAB program and some illustrative examples of the output signal under given input signal and **channel conditions** . The **channel** model is **based** on a number of time- **varying** taps modelling the **signal** dispersion in a multipath environment. Generation of the tap fading process is implemented using a novel method based on summation of a number of complex phasors. (3 Refs)
  Subfile: B

6237619   INSPEC Abstract Number: B1999-06-6120-005
  Title: Differential detection PSK using IIR filter for improving detection performance
  Author(s): Hamamoto, N.; Hashimoto, Y.; Ide, T.; Sakasai, M.; Tejima, T.; Matsumoto, Y.
  Journal: Review of the Communications Research Laboratory   vol.44, no.1-2   p.47-58
  Publisher: Minist. Post Telecommun,
  Publication Date: March-June 1998 Country of Publication: Japan
  CODEN: TSKKED ISSN: 0914-9279
  SICI: 0914-9279(199803/06)44:1/2L.47:DDUF;1-N
  Material Identity Number: M745-1999-001
  Language: Japanese   Document Type: Journal Paper (JP)
  Treatment: Practical (P); Theoretical (T)
  Abstract: This paper presents a method for improving the performance of the differential detection of differentially encoded phase shift keying (DPSK). The structure of the proposed detection scheme consists of a

conventional differential detection circuit equipped with an infinite
impulse response (IIR) filter, combined with decision feedback. The results
of theoretical analysis and computer simulation show that performance of
the proposed detection method can approach that of coherent detection of
DPSK under additive white Gaussian noise conditions with no increase in
architectural complexity. Furthermore, the proposed detector has the
ability to optimize performance under conditions of static or fading. An
adaptive scheme suitable for time- **varying** Rician fading **channel**
 conditions is presented, and performance results obtained by computer
simulation are given. (11 Refs)
   Subfile: B

   28/7/11   (Item 8 from file: 2)

6188056   INSPEC Abstract Number: B1999-04-6120-029
   **Title: Adaptive reduced state-transition Viterbi differential detection of
M-ary DPSK signals transmitted over Gaussian and frequency-nonselective
Rayleigh faded channels**
   Author(s): Adachi, F.
   Author Affiliation: Wireless Lab., NTT Mobile Commun. Inc., Yokosuka,
Japan
   Abstract: Adaptive maximum likelihood differential detection implemented
by a reduced state-transition Viterbi algorithm (called adaptive 3-state
RSTVDD) is presented for adaptive reception of M-ary differential phase
shift keying (DPSK) signals transmitted over additive white Gaussian noise
(AWGN) and frequency-nonselective Rayleigh fading channels. The adaptive
3-state RSTVDD comprises 1DD, a differential encoder, and reverse
modulator, followed by reduced-state (3-state) Viterbi DD (RSVDD) with
adaptive phase reference estimation. The adaptive 3-state RSVDD detector
estimates the sequence of phase errors of the 1DD output. The phase
reference estimator is an adaptive least mean square (LMS) filter with a
step-size that **adapts** to **changing channel conditions** . The final
detected symbol sequence is the modulo-2 pi sum of the 1DD output phase
sequence and the detected phase error sequence. The bit error rate (BER)
performance of M-ary DPSK, M=4, 8, and 16, in the AWGN and Rayleigh fading
channels is evaluated by computer simulation to show that adaptive 3-state
RSTVDD can achieve almost the same BER performance as the previously
developed adaptive M-state RSVDD. Since the number of trellis states is
reduced to three irrespective of M, the adaptive 3-state RSTVDD has lower
computation complexity and it is particularly useful for M-ary DPSK with
M>or=8. (21 Refs)
   Subfile: B

   28/7/12   (Item 9 from file: 2)

6103193   INSPEC Abstract Number: B9901-6250-037
 Title: Reconfigurable adaptive RAKE receiver for wideband CDMA systems

   Author(s): Latva-aho, M.; Juntti, M.; Oppermann, I.
   Author Affiliation: Centre for Wireless Commun., Oulu Univ., Finland
   Conference Title: VTC '98. 48th IEEE Vehicular Technology Conference.
Pathway to a Global Wireless Revolution (Cat. No.98CH36151)   Part vol.3
p.1740-4 vol.3
   Publisher: IEEE, New York, NY, USA
   Publication   Date: 1998 Country   of   Publication: USA   3 vol.
(xlviii+xliv+2598) pp.
   ISBN: 0 7803 4320 4   Material Identity Number: XX98-01713
   U.S. Copyright Clearance Center Code: 0 7803 4320 4/98/$10.00
   Conference   Title: VTC '98.   48th IEEE Vehicular Technology Conference.
Pathway to a Global Wireless Revolution
   Conference Sponsor: IEEE Vehicular   Technol.   Soc.;   IEEE Canada; IEEE
Ottawa Sect
   Conference Date: 18-21 May 1998   Conference Location: Ottawa, Ont.,
Canada
   Language: English   Document Type: Conference Paper (PA)
   Treatment: Theoretical (T)

   Abstract: Conventional RAKE receiver is near-far limited in code-division
multiple-access (CDMA) systems. Linear minimum mean squared error (LMMSE)
criterion can be used to obtain near-far resistant single-user receivers.
Depending on the optimization criterion different adaptive receivers are
obtained. A novel adaptive LMMSE-RAKE receiver based on two different LMMSE
criteria is presented. The receiver combines the conventional RAKE receiver
and single-user LMMSE receivers. Depending on a quality indicator the
receiver switches itself to different modes **depending** on the radio
 channel   **conditions** . According to the simulation results the novel
receiver concept remarkably improves the performance of the conventional
RAKE receivers under various channel conditions and data rates. (7 Refs)
   Subfile: B

 28/7/13   (Item 10 from file: 2)

6072760   INSPEC Abstract Number: B9812-6250-019
   Title: Cramer-Rao bounds in the parametric estimation of fading
 radiotransmission channels

   Author(s): Gini, F.; Luise, M.; Reggiannini, R.
   Author Affiliation: Dipt. di Ingegneria della Inf., Pisa Univ., Italy
   Journal: IEEE Transactions on Communications   vol.46, no.10   p.1390-8
   Publisher: IEEE,
   Publication Date: Oct. 1998 Country of Publication: USA
   CODEN: IECMBT ISSN: 0090-6778
   SICI: 0090-6778(199810)46:10L.1390:CBPE;1-U
   Material Identity Number: I203-98011
   U.S. Copyright Clearance Center Code: 0090-6778/98/$10.00
   Document Number: S0090-6778(98)07765-4
   Language: English   Document Type: Journal Paper (JP)
   Treatment: Theoretical (T)

   Abstract: The context of this paper is parameter estimation for linearly
modulated digital data signals observed on a frequency-flat time-selective
fading channel affected by additive white Gaussian noise. The aim is the
derivation of Cramer-Rao lower bounds for the joint estimation of all those
channel parameters that impact signal detection, namely, carrier phase,
carrier frequency offset (Doppler shift), frequency rate of **change**

(Doppler rate), **signal** amplitude, fading power, and Gaussian noise power. Time-selective frequency-flat fading is modeled as a low-pass autoregressive multiplicative distortion process. In particular, the important case of "slow" fading, with the multiplicative process remaining constant over the whole data burst, is specifically discussed. Asymptotic expressions of the bounds, valid for a large observed sample or for high signal-to-noise ratio (SNR), are also derived in closed form. A few charts with numerical results are finally reported to highlight the **dependence** of the bounds on **channel status** (SNR, fading bandwidth, etc.). (21 Refs)
 Subfile: B
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28/7/14   (Item 11 from file: 2)
DIALOG(R)File   2:INSPEC
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6023074   INSPEC Abstract Number: B9810-6140C-618
 Title: **Adaptive rate-controlled, robust video communication over packet wireless networks**
 Author(s): Rajugopal, G.R.; Hafez, R.H.M.
 Author Affiliation: ShareWave Inc., El Dorado Hills, CA, USA
 Journal: Mobile Networks and Applications   vol.3, no.1   p.33-47
 Publisher: Baltzer; ACM Press,
 Publication Date: 1998 Country of Publication: Netherlands
 CODEN: JSTAFL ISSN: 1383-469X
 SICI: 1383-469X(1998)3:1L.33:ARCR;1-H
 Material Identity Number: G269-98003
 Language: English   Document Type: Journal Paper (JP)
 Treatment: Practical (P); Experimental (X)
 Abstract: Video transmission over wireless packet networks is gaining importance due to the concept of universal personal communication. Further, it is considered an important step towards wireless multimedia. The challenge however is to achieve good video **quality** over mobile channels, where typically the **channel conditions vary** due to **signal** fading. Hence this paper investigates adaptive rate-controlled video transmission for robust video communication under a packet wireless environment. A combination of a mobile and an ATM backbone network is assumed in this work. An error-resilient design for the video coder, as proposed by Rajugopal et al., (1996), is employed here. This video coder comprises wavelet transform (WT), multi-resolution motion estimation (MRME) and a robust design for zero tree quantization. Two configurations, one employing MRME and the other using 1D-WT for temporal analysis, are considered for the video coder. Adaptive dynamic rate control is required to adapt the video communication to the channel conditions. It provides more channel protection when the channel is severe and improves the source rate and hence the performance when the conditions are favorable. An algorithm for dynamic rate control under **varying channel conditions** is proposed. It is evaluated under narrowband and broadband **channel conditions** . From the results, it is concluded that the dynamic rate control is very effective in optimizing the quality under **varying** mobile **channel conditions** . It is observed that the dynamic rate control provides at least an acceptable video **quality** under severe **channel conditions** and a good video quality when the channel conditions are favorable. (21 Refs)
 Subfile: B
 Copyright 1998, IEE

28/7/15   (Item 12 from file: 2)

6002489   INSPEC Abstract Number: B9810-6120-001
  **Title: Adaptive differential detection using linear prediction for M-ary
DPSK**
  Author(s): Adachi, F.
  Author Affiliation: R&D Dept., NTT Mobile Commun. Network Inc., Kanagawa,
Japan
  Journal: IEEE Transactions on Vehicular Technology   vol.47, no.3   p.
909-18
  Publisher: IEEE,
  Publication Date: Aug. 1998 Country of Publication: USA
  CODEN: ITVTAB ISSN: 0018-9545
  SICI: 0018-9545(199808)47:3L.909:ADDU;1-C
  Material Identity Number: I112-98003
  U.S. Copyright Clearance Center Code: 0018-9545/98/$10.00
  Document Number: S0018-9545(98)02482-7
  Language: English   Document Type: Journal Paper (JP)
  Treatment: Theoretical (T)
  Abstract: This paper proposes a novel adaptive differential detection
scheme (adaptive DD), which can significantly reduce the irreducible
bit-error rate (BER) of M-ary DPSK due to Doppler spread by the adaptive
linear prediction of the reference signal. The predictor coefficient is
 adapted to **changing** **channel** **conditions** by using the recursive
least-square (RLS) algorithm. A phase sequence estimation based on the
M-state Viterbi algorithm (VA) and another based on the decision feedback
algorithm (DFA) are presented. A theoretical BER analysis is presented for
adaptive DD-DFA. BER performances of 2 and 4DPSK in Rayleigh fading
channels are evaluated by computer simulations. When the RLS forgetting
factor of beta =1 is used, simulation results show that the irreducible BER
of 4DPSK can be reduced to 7.2*10/sup -5/ (3.9*10/sup -4/) for VA (DFA)
while conventional DD offers 3.9*10/sup -3/ when f/sub D/T/sub b/ (maximum
Doppler frequency times bit duration)=0.01 and average E/sub b//N/sub 0/
(signal energy per bit-to-additive white Gaussian noise (AWGN) power
spectrum density ratio)=60 dB, where most errors are produced by Doppler
spread. Adaptive DD is also effective in AWGN channels-simulations show
that for the case of 4DPSK, a performance gain of 1.2 (0.7) dB is achieved
over conventional DD for VA (DFA) at BER=10/sup -3/. (11 Refs)
  Subfile: B

  28/7/17   (Item 14 from file: 2)

5371830   INSPEC Abstract Number: B9610-6120-013
  **Title: Differential detection with IIR filter for improving DPSK detection
performance**
  Author(s): Hamamoto, N.
  Author Affiliation: Commun. Res. Lab., Minist. of Posts & Telecommun.,
Tokyo, Japan
  Journal: IEEE Transactions on Communications   vol.44, no.8   p.959-66
  Publisher: IEEE,
  Publication Date: Aug. 1996 Country of Publication: USA
  CODEN: IECMBT ISSN: 0090-6778
  SICI: 0090-6778(199608)44:8L.959:DDWF;1-8
  Material Identity Number: I203-96009
  U.S. Copyright Clearance Center Code: 0090-6778/96/$05.00
  Document Number: S0090-6778(96)05494-3

Language: English   Document Type: Journal Paper (JP)
Treatment: Theoretical (T)

Abstract: This paper presents a method for improving the performance of differential detection of differentially encoded phase shift keying (DPSK). The structure of the proposed detection scheme consists of a conventional differential detection circuit equipped with an infinite impulse response (IIR) filter combined with decision feedback. The results of theoretical analysis and computer simulation show that performance of the proposed detection method can approach that of coherent detection of DPSK under additive white Gaussian noise (AWGN) conditions without any increase in architectural complexity. Furthermore, a parameter of the proposed detector can be varied to optimize performance for static or fading **conditions** . An **adaptive** scheme suitable for time **varying** Rician-fading **channel conditions** is presented, and performance results obtained by computer simulation are given. (6 Refs)
Subfile: B

28/7/18   (Item 15 from file: 2)

5330702   INSPEC Abstract Number: B9609-6140C-206
Title: Robust image communication using subband coding and multilevel modulation
Author(s): Lervik, J.M.; Ramstad, T.A.
Author Affiliation: Dept. of Telecommun., Norwegian Inst. of Technol., Trondheim, Norway
Language: English   Document Type: Conference Paper (PA); Journal Paper (JP)
Treatment: Practical (P); Theoretical (T)

Abstract: Visual communication systems can exploit the advantages of analog transmission and digital compression: analog transmission allows the quality of the recovered data to vary gracefully as the **channel conditions vary** , whereas digital compression allows for powerful data reduction. In this paper, a system optimized for bandwidth and power-limited channels which combines analog and digital communication principles is proposed. The system achieves a high bandwidth compression efficiency by combining subband signal decomposition and dynamic bandwidth allocation with 81-PAM transmission. Furthermore, graceful degradation is obtained by finding mappings from the subband samples to the channel space which minimize the impact of channel errors in the **reconstructed signal** . The optimized mapping system outperforms a conventional system using random mappings. In addition, it is shown that the proposed system performs better, in a rate-distortion sense for a given channel signal-to-noise ratio, than a similar subband system using conventional bit allocation,

optimized mappings, and 64-PAM. A novel definition for measuring system efficiency, based on comparisons to pure analog PAM transmission, is used to evaluate the proposed system. The ideas presented in this paper can be used for future terrestrial TV broadcasting and mobile communication systems. (18 Refs)
  Subfile: B
  Copyright 1996, IEE

 28/7/19   (Item 16 from file: 2)
DIALOG(R)File   2:INSPEC
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5318198   INSPEC Abstract Number: B9608-6120B-067
  Title: **Adaptive quantization for fading channels with feedback**
  Author(s): Amanullah, A.S.; Salehi, M.
  Author Affiliation: Dept. of Electr. & Comput. Eng., Northeastern Univ., Boston, MA, USA
  Journal: International Journal of Wireless Information Networks   vol.2, no.2   p.83-90
  Publisher: Plenum,
  Publication Date: April 1995 Country of Publication: USA
  CODEN: IJWNEY ISSN: 1068-9605
  SICI: 1068-9605(199504)2:2L.83:AQFC;1-F
  Material Identity Number: C424-96002
  Language: English   Document Type: Journal Paper (JP)
  Treatment: Theoretical (T)
  Abstract: The effect of the presence of a feedback channel on the transmission of information was first considered by Shannon (1956), who showed that the capacity of a memoryless channel is not increased by the existence of a feedback link even if the feedback link is noiseless. Later it was shown that the information on a feedback channel can be used to improve considerably the performance of channel coding. In this work we study the transmission of an information source through a fading channel with feedback, modeled by a finite-state channel in the Gilbert-Elliot sense. We show that by employing the feedback information in the quantizer design for this finite-state channel, one can achieve lower overall distortion compared to the case where feedback is not available. The feedback channel is used to estimate the channel state using a hidden Markov model, and a quantizer matched to the **channel   state** is chosen **based** on this information. (12 Refs)
  Subfile: B
  Copyright 1996, IEE

 28/7/20   (Item 17 from file: 2)
DIALOG(R)File   2:INSPEC
(c) 2004 Institution of Electrical Engineers. All rts. reserv.

5251387   INSPEC Abstract Number: B9606-6120-008
  Title: **Upper bound performance of adaptive modulation in a slow Rayleigh fading channel**
  Author(s): Torrance, J.M.; Hanzo, L.
  Author Affiliation: Dept. of Electron. & Comput. Sci., Southampton Univ., UK
  Journal: Electronics Letters   vol.32, no.8   p.718-19
  Publisher: IEE,
  Publication Date: 11 April 1996 Country of Publication: UK
  CODEN: ELLEAK ISSN: 0013-5194
  SICI: 0013-5194(19960411)32:8L.718:UBPA;1-H
  Material Identity Number: E089-96008

Abstract: The upper bound bit error rate (BER) performance of a time
division duplex (TDD) system, where the number of modulation **levels** is
adapted on a very short term basis, **depending** upon the **channels**
conditions , is derived and solved by numerical integration. The
performance shows very close correspondence with simulated results. (4
Refs)
Subfile: B

28/7/21   (Item 18 from file: 2)
DIALOG(R)File   2:INSPEC
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5227060   INSPEC Abstract Number: B9605-6120-015
 Title: Adaptive differential detection for M-ary DPSK
  Author(s): Adachi, F.
  Author Affiliation: R&D Dept., NTT Mobile Commun. Network Inc., Kanagawa,
Japan
  Abstract: The adaptive differential detection (adaptive DD) of M-ary DPSK
signals is proposed in which the phase reference for differential detection
is estimated using the least mean square algorithm with step size optimally
 adapted to **changing** **channel** **conditions** . The Viterbi algorithm and
decision feedback algorithm are applied to effectively perform the maximum
likelihood detection of the transmitted phase sequence. The bit error rate
(BER) performance of adaptive DD is evaluated by computer simulations of
4DPSK in additive Gaussian noise (AWGN) and Rayleigh fading channels. In
AWGN channels, BER performance close to that of coherent detection with
differential decoding is achieved with performance loss of only 0.3 dB. In
Rayleigh fading, the irreducible BER owing to fading Doppler spread can be
reduced almost by half compared with conventional DD without prior
knowledge of fading statistics. (25 Refs)
  Subfile: B

28/7/22   (Item 19 from file: 2)
DIALOG(R)File   2:INSPEC
(c) 2004 Institution of Electrical Engineers. All rts. reserv.

4910124   INSPEC Abstract Number: B9505-6220M-002
 Title: A codec candidate for the GSM half rate speech channel
  Author(s): Muller, J.-M.; Wachter, B.
  Author Affiliation: ANT Nachrichtentech. GmbH, Backnang, Germany

Conference Title: Proceedings of ICASSP '94. IEEE International Conference on Acoustics, Speech and Signal Processing
Conference Sponsor: IEEE Signal Process. Soc
Conference Date: 19-22 April 1994   Conference Location: Adelaide, SA, Australia
Language: English   Document Type: Conference Paper (PA)
Treatment: Practical (P)

Abstract: The ANT approach for the standardisation of the GSM half rate codec is presented. The speech codec uses efficient scalar LSP quantization, joint optimization of **adaptive** and fixed codebook **signals** and works in two modes using different bit rates (5.7 and 6.15 kbit/s). The advantage of this dual mode scheme is an increase of the average error robustness without degradation of the intrinsic speech **quality** . The **channel** codec is **based** on rate compatible punctured codes. The channel decoder generates soft information for each decoded information bit. Bad frame detection is exclusively based on the exploitation of soft decision information. The use of error concealment at parameter level in the channel decoder as well as at signal level in the speech decoder is discussed. The complexity of speech and channel codec is 3.8 times the GSM full rate codec complexity. Subjective tests showed that the average Q-value of all test conditions is 1.7 db below the average GSM full rate Q-value. (8 Refs)
Subfile: B
Copyright 1995, IEE
?
PLEASE ENTER A COMMAND OR BE LOGGED OFF IN 5 MINUTES
? t28/7/25-26,30-35

28/7/25   **(Item 22 from file: 2)**
DIALOG(R)File   2:INSPEC
(c) 2004 Institution of Electrical Engineers. All rts. reserv.

04149292   INSPEC Abstract Number: B9206-6140-247, C9206-7410F-051
   Title: Performance evaluation of self-organizing map based neutral equalizers in dynamic discrete-signal detection
   Author(s): Kohonen, T.; Raivio, K.; Simula, O.; Henriksson, J.
   Author Affiliation: Helsinki Univ. of Technol., Lab. of Comput. & Inf. Sci., Espoo, Finland
   Conference Title: Artificial Neural Networks. Proceedings of the 1991 International Conference. ICANN-91   p.1677-80 vol.2
   Editor(s): Kohonen, T.; Makisara, K.; Simula, O.; Kangas, J.
   Publisher: North-Holland, Amsterdam, Netherlands
   Publication Date: 1991 Country of Publication: Netherlands   2 vol. xix+1819 pp.
   ISBN: 0 444 89178 1
   Conference Date: 24-28 June 1991   Conference Location: Espoo, Finland
   Language: English   Document Type: Conference Paper (PA)
   Treatment: Practical (P)
   Abstract: Novel equalizer structures utilizing neural computation have recently been developed for **adaptive** discrete- **signal** detection. The equalizer structures combine the traditional transversal equalizer and the self-organizing map algorithm in parallel or cascade. Extensive simulations have been run to investigate different parameter effects using a two-path channel model and 16-QAM (quadrature amplitude modulation). The results have shown that the neural equalizer adapts very well to **changing** **channel** **conditions** , including both linear multipath and nonlinear distortions. Especially in difficult channels, the new structures are superior when compared with the traditional equalizers. The computational complexities of the combined structures are not significantly higher when compared to the practical linear equalizers. (5 Refs)
   Subfile: B C

28/7/26   (Item 23 from file: 2)
DIALOG(R)File   2:INSPEC
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04051673   INSPEC Abstract Number: B9202-1290-008, C9202-5190-018
  Title: **Improving design feedback equaliser performance using neural networks**
  Author(s): Raivio, K.; Simula, O.; Henriksson, J.
  Author Affiliation: Lab. of Comput. & Inf. Sci., Helsinki Univ. of Technol., Espoo, Finland
  Journal: Electronics Letters   vol.27, no.23   p.2151-3
  Publication Date: 7 Nov. 1991 Country of Publication: UK
  CODEN: ELLEAK ISSN: 0013-5194
  U.S. Copyright Clearance Center Code: 0013-5194/91/$3.00+0.00
  Language: English   Document Type: Journal Paper (JP)
  Treatment: Applications (A); Experimental (X)
  Abstract: Novel equaliser structures combining traditional transversal equalisers and neural computation have been introduced for **adaptive** discrete- **signal** detection. Extensive simulations using a two-path channel model and 16QAM modulation have been run to investigate the performance characteristics of these neural equalisers. The results have shown that they adapt very well to **changing channel conditions** , including both linear multipath and nonlinear distortions. The new structures are superior when compared to the traditional equalisers with equal computational complexity, especially in difficult channels. (7 Refs)
  Subfile: B C

28/7/30   (Item 1 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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06335251   E.I. No: EIP03137412409
  Title: **Analyzing the performance of the space-time block codes with partial channel state feedback**
  Author: Sharma, Naresh; Geraniotis, Evaggelos
  Corporate Source: Dept. Elec. Eng. Inst. Syst. Res. University of Maryland, College Park, MD 20742, United States
  Conference Title: 2000 IEEE Wireless Communications and Networking Conference
  Conference Location: Chicago, IL, United States   Conference Date: 20000923-20000928
  Sponsor: IEEE Communications Society
  E.I. Conference No.: 60535
  Source: 2000 IEEE Wireless Communications and Networking Conference 2000. (IEEE cat n 00TH8540)
  Publication Year: 2000
  ISBN: 0780365968
  Language: English
  Document Type: CA; (Conference Article)   Treatment: T; (Theoretical); X; (Experimental)
  Journal Announcement: 0303W5
  Abstract: The theory of space-time codes for multiple antennas at the transmitter and receiver provided a useful framework for minimizing the probability of pair-wise frame error when the channel is unknown at the receiver. The design criterion for the codes were developed by averaging over all the channel states. In practice, a feedback channel of low band-width is usually available where the transmitter can get some **channel**

state information from the receiver. The transmitter can use this information to **change** it's power **level** or modulation or both. Since the **channel** **state** is a matrix instead of a scalar in the single antenna case, we first find out what is the sufficient statistic for space-time orthogonal block codes. It is shown that for a given channel state, the decoder essentially sees an AWGN channel with the signal to noise ratio scaled by the sufficient statistic. We discuss the optimal power control and adaptive modulation strategies. The effect of delay in passing the channel information from the receiver to the transmitter is examined. The results show a significant improvement (more than 10 dB in some cases) over the conventional system without feedback. 10 Refs.

 28/7/31   (Item 2 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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05753732   E.I. No: EIP01015471709
   Title: **Performance of link adaptation in GPRS networks**
   Author: Gutierrez, Pablo Jose Ameigeiras; Wigard, Jeroen; Andersen, Peter Nodbak; Damgaard, Hans Christian; Mogensen, Preben
   Corporate Source: Aalborg Univ, Aalborg, Den
   Conference Title: 52nd Vehicular Technology Conference (IEEE VTS Fall VTC2000)
   Conference Location: Boston, MA, USA   Conference Date: 20000924-20000928
   Sponsor: IEEE Boston Section; IEEE Vehicular Techonology Society
   E.I. Conference No.: 57806
   Source: IEEE Vehicular Technology Conference v 2 n 52ND 2000. IEEE, Piscataway, NJ, USA,00CB37152. p 492-499
   Publication Year: 2000
   CODEN: IVTCDZ   ISSN: 0740-0551
   Language: English
   Document Type: CA; (Conference Article)   Treatment: T; (Theoretical)
   Journal Announcement: 0102W3
   Abstract: In GPRS four coding schemes have been defined with different degrees of data protection. The selection of fixed one for a certain packet transmission would lead to a throughput loss if the **channel** **quality** **conditions** **vary** during the connection, therefore, a link adaptation algorithm based on a BLER estimation is proposed and analyzed. The BLER is calculated from the acknowledgement messages reported by the receiver, so the acknowledgement frequency impacts the link adaptation, and therefore, is to be studied in the present article. The resulting link adaptation algorithm has been analyzed with a dynamic network simulator, under different frequency reuse patterns and frequency hopping strategies. Furthermore, the mean user throughput for the fixed coding schemes and for link adaptation has been estimated from GSM network reported measurements, and a network operator planning tool. (Author abstract) 7 Refs.

 28/7/32   (Item 3 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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05698425   E.I. No: EIP00115396287
   Title: **Data link control protocol for wireless ATM networks with adaptive coding rate**
   Author: Chan, K.S.; Chan, Sammy; Ko, K.T.
   Corporate Source: City Univ of Hong Kong, Kowloon, Hong Kong
   Conference Title: Proceedings of the IEEE Conference 2000 on High Perfomance Switching and Routing (ATM 2000)

Conference Location: Heidelberg, Ger   Conference Date: 20000626-20000629
E.I. Conference No.: 57526
Source: IEEE ATM Workshop, Proceedings 2000. p 483-489
Publication Year: 2000
ISSN: 1098-7789
Language: English
Document Type: JA; (Journal Article)   Treatment: T; (Theoretical)
Journal Announcement: 0012W3

Abstract: In this paper, we propose a new data link control protocol for wireless ATM networks. This new protocol can support both real time and non-real-time services by adopting different error control mechanisms. For real time traffic, only forward error control (FEC) is used for error correction. For non-real-time traffic, a hybrid automatic repeat request (ARQ) scheme is adopted to reduce the cell loss ratio to a minimum level. In both the FEC and hybrid ARQ schemes, the coding rate is **adapted** to the **channel conditions** . When the signal-to-noise ratio (SNR) is high, the coding rate may be higher; while when the channel is bad, the coding rate is adjusted to be lower. The automatic coding rate adaptiveness guarantees the high utilization of the scarce wireless channel resources. (Author abstract) 13 Refs.

28/7/33   (Item 4 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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05368651   E.I. No: EIP99094799659
  Title: Adaptive pulse sequence enhancer and correlator
  Author: Liu, Hong; Cai, Ping; Hui, Junying
  Corporate Source: Harbin Engineering Univ, Harbin, China
  Source: Shengxue Xuebao/Acta Acustica v 23 n 5 1998. p 422-429
  Publication Year: 1998
  CODEN: SHGHAS   ISSN: 0371-0025
  Language: Chinese
  Document Type: JA; (Journal Article)   Treatment: A; (Applications); T; (Theoretical); X; (Experimental)
  Journal Announcement: 9911W1
  Abstract: Adaptive pulse sequence enhancer is the extension of adaptive line enhancer. Adaptive line enhancer can effectively detect CW signal only not so effective for any periodic **signals** . But **adaptive** pulse sequence enhancer can detect any periodic sequence effectively. Simulation test shows that the detective threshold of the new processor, CAAPSECO (coherent accumulator plus adaptive pulse sequence enhancer plus correlator), is lower than match filter. Its detective ability is better than match filter both in the ideal and multipath **channel conditions** . (**Edited** author abstract) 5 Refs.

28/7/34   (Item 5 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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05354880   E.I. No: EIP99094779649
  Title: Iterative decoding of multiple descriptions
  Author: Srinivasan, Murari
  Corporate Source: Univ of Maryland, College Park, MD, USA
  Conference Title: Proceedings of the 1999 Data Compression Conference, DCC-99
  Conference Location: Snowbird, UT, USA Conference Date: 19990329-19990331
  Sponsor: IEEE

E.I. Conference No.: 55240
Source: Data Compression Conference Proceedings 1999. p 463-472
Publication Year: 1999
CODEN: DDCCF9   ISSN: 1068-0314
Language: English
Document Type: JA; (Journal Article)   Treatment: G; (General Review)
Journal Announcement: 9910W3

Abstract: This paper considers the transmission of multiple descriptions
over noisy channels rather than the on-off channels that are traditionally
considered. We introduce the use of iterative decoding techniques similar
to those used in 'turbo' decoding to decode multiple correlated
descriptions transmitted over a noisy channel. For a given transmission
rate per channel and a given **channel   state** , the efficacy of iterative
decoding **depends** on the correlatedness of the two descriptions produced
by the multiple description encoder. We demonstrate that there is an
optimal amount of redundancy or **correlation** for a given **channel   state**
. Hence, multiple description codes may also be viewed as joint
source-channel codes. (Author abstract) 8 Refs.

 28/7/35   (Item 6 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)

04938057   E.I. No: EIP98024050207
  Title: Adaptive LMMSE receiver for wideband CDMA systems
  Author: Oppermann, I.; Latva-aho, M.
  Corporate Source: Univ of Oulu, Oulu, Finl
  Conference   Title: Proceedings of the 1997 IEEE Global Telecommunications
Mini-Conference
  Conference   Location: Phoenix,   AZ,   USA   Conference   Date:
19971103-19971108
  Sponsor: IEEE
  E.I. Conference No.: 47733
  Source: Conference Record / IEEE Global Telecommunications Conference v 4
1997. IEEE, Piscataway, NJ, USA,97CB36125. p 133-138
  Publication Year: 1997
  CODEN: CRIEET
  Language: English
  Document Type: CA; (Conference Article)   Treatment: T; (Theoretical)
  Journal Announcement: 9804W2

  Abstract: Practical implementation of a linear minimum mean-squared error
(LMMSE) receiver for wideband CDMA systems operating over fading channels
is presented. The receiver uses improvements on the standard least mean
squares (LMS) algorithm implementation of the adaptive LMMSE receiver to
increase the speed of convergence during training and the rate at which the
algorithm can track **changes** in the **channel   conditions** . The approach
taken is to break the received signal into quasi-stationary blocks and
repeatedly apply the LMS algorithm for the blocks. The number of iterations
as well as the block size is adapted according to the short time MSE value.
Multiple step-sizes are used in parallel to speed up the convergence of the
algorithm. The numerical results demonstrate that the modified adaptive
algorithm improves the performance of the adaptive LMMSE receiver
remarkably in fading channels. (Author abstract) 7 Refs.
? t28/7/39-48

 28/7/39   (Item 10 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)

02251717   E.I. Monthly No: EIM8706-037206

Title: ADAPTIVE NONPARAMETRIC ACQUISITION OF FH-SS SIGNALS IN JAMMING.

Author: Pawlowski, Peter R.; Polydoros, Andreas
Corporate Source: TRW, Redondo Beach, CA, USA
Conference Title: MILCOM 86: 1986 IEEE Military Communications Conference
- Conference Record. Communications-Computers: Teamed for the '90's.
Conference Location: Monterey, CA, USA   Conference Date: 19861005
Sponsor: IEEE Communications Soc, New York, NY, USA; US Air Force
Communications & Electronics Assoc, USA; US Dep of Defense, Washington, DC,
USA
E.I. Conference No.: 09528
Source: Proceedings - IEEE Military Communications Conference 1986. Publ
by IEEE, New York, NY, USA. Available from IEEE Service Cent (Cat n
86CH2323-4), Piscataway, NJ, USA Pap 31. 6. 1, 8p
Publication Year: 1986
CODEN: PMICET
Language: English
Document Type: PA; (Conference Paper)
Journal Announcement: 8706
Abstract: A matched-filter receiver for frequency-hopped spread-spectrum
code acquisition in jamming is analyzed. The receiver uses an adaptive,
nonparametric distribution-free median test detector requiring no knowledge
of side information about the signal, jammer, and thermal noise parameters
to implement an asymptotically constant false alarm rate test. The median
of a reference sample set, empirically describing the code-absent
probability distribution, determines the threshold used in the
nonparametric detector. By updating the reference set every hop epoch, the
threshold adapts to the **channel condition** . **Adaptive threshold**
setting introduces memory so that tests are no longer independent, making
exact closed-form analysis difficult. Performance approximations are
developed and compared to simulation results illustrating acquisition
performance. 9 refs.

28/7/40   (Item 1 from file: 34)

05809843   Genuine Article#: WZ041   Number of References: 30
**Title: A study on robust utterance verification for connected digits
    recognition**
Author(s): Rahim MG (REPRINT) ; Lee CH; Juang BH
Corporate Source: AT&T BELL LABS,RES, 600 MT AVE/MURRAY HILL//NJ/07974
    (REPRINT); AT&T BELL LABS,LUCENT TECHNOL/MURRAY HILL//NJ/07974
Journal: JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA, 1997, V101, N5,1 (
    MAY), P2892-2902
ISSN: 0001-4966   Publication date: 19970500
Publisher: AMER INST PHYSICS, CIRCULATION FULFILLMENT DIV, 500 SUNNYSIDE
    BLVD, WOODBURY, NY 11797-2999
Language: English   Document Type: ARTICLE
Abstract: Utterance verification represents a key technology in the design
    of a user-friendly speech recognition system. One essential element
    when designing such a system is the ability to maintain a uniform
    performance over a wide range of acoustic conditions. An acoustic
    mismatch between training and testing conditions often results in an
    undesirable performance degradation This paper addresses the issue of
    robustness in utterance verification of a speech recognition system.
    Two techniques, namely signal bias removal (SBR) and on-line
    adaptation, are studied. The SBR algorithm is used to deal with global
    mismatch conditions caused by handset and channel differences. The
    on-line adaptation algorithm is used to adjust verification threshold
    at runtime for achieving a desirable trade-off between false rejection

and false alarm in new test **conditions** . Various on- **line** adaptation
schemes are investigated. We show that both supervised or unsupervised
adaptation can effectively **adjust** the verification **threshold** to
achieve a desirable performance trade-off irrespective of the initial
setting of the threshold. We report on connected digit
recognition/verification results for matched and mismatched training
and testing conditions. At a 5% digit string rejection rate, the
proposed robust utterance verification system gives a reduction in
string error rate between 32% and 35% over the conventional system,
while still correctly rejects over 99.9% of nonvocabulary utterances.
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28/7/41   (Item 1 from file: 35)
DIALOG(R)File   35:Dissertation Abs Online
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01534982   ORDER NO: AAD97-07804
**CARRIER RECOVERY FOR DIGITAL TRANSMISSION IN LAND MOBILE CELLULAR
COMMUNICATION CHANNELS**
  Author: BARGER, HOWARD ALLEN
  Degree: PH.D.
  Year: 1996
  Corporate Source/Institution: THE UNIVERSITY OF TEXAS AT ARLINGTON (2502
)
  Supervisor: VASANT K. PRABHU
  Source: VOLUME 57/10-B OF DISSERTATION ABSTRACTS INTERNATIONAL.
           PAGE 6434.   234 PAGES

    In recent years, technologies such as cellular radio, integrated
circuits, and microprocessors have made long range communications from
mobile stations practical and affordable. The availability of technology
has resulted in a demand for mobile radio communication services that
exceeds the capacity of our present systems. To ease demand, the available
system capacity must be increased. This may be provided by either
allocating more frequency channels to the service or by making more
efficient use of those currently allocated.
    Spectrally efficient digital modulations, such as higher ordered
quadrature amplitude modulation (M-ary QAM), are among the most promising
techniques to improve system capacity. Whereas, these modulations are
spectrally efficient, they require coherent demodulation which requires
accurate representation of the signal carrier. Mobile signals, especially
at UHF, are subject to multipath propagation that produces rapid variations
in signal amplitude and phase. These variations prohibit the use of a
stable carrier reference for demodulation; a reference that **varies** with
channel conditions is required. This research is to investigate a method
for recovering the dynamically **changing** carrier from modulated **signals** .
The methods investigated are applicable to the narrowband land mobile
channel over which the fading may be considered non-dispersive.
    The background for this work is composed of research characterizing
land mobile communication channels, and research in developing carrier
recovery techniques. Previous work to characterize the channel has been
concerned with **change** of the **signal** level over time, and the period of
time the signal falls below an acceptable level. This work is now expanded
to characterize the dynamic channel in terms of rates at which amplitude
and phase may change, providing an understanding of channel effects at the
demodulator. A carrier recovery technique is proposed to compensate for
amplitude and phase distortion of the incoming signal resulting in correct
recovery of data. Data is recovered using differential decision directed
demodulation using a digital gain/phase-locked loop (D$\sp5$GPLL)

technique. A DSP demodulator is constructed and used to demonstrate the technique using recorded measurements of channel multipath to provide the channel environment.

28/7/42   (Item 1 from file: 94)
DIALOG(R)File   94:JICST-EPlus
(c)2004 Japan Science and Tech Corp(JST). All rts. reserv.

02888470   JICST ACCESSION NUMBER: 97A0387021   FILE SEGMENT: PreJICST-E
High-speed derivation method of   signal   change **generation** condition
   in combinational circuit .
NAKAHARA MICHIHIRO (1); ONISHI JUN (1); SUGIYAMA YUJI (1)
(1) Okayama Univ., Fac. of Eng.
Denki, Joho Kanren Gakkai Chugoku Shibu Rengo Taikai Koen Ronbunshu, 1996,
   VOL.47th, PAGE.330
JOURNAL NUMBER: L1892AAF
LANGUAGE: Japanese   COUNTRY OF PUBLICATION: Japan
DOCUMENT TYPE: Conference Proceeding
MEDIA TYPE: Printed Publication

28/7/43   (Item 1 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2004 INIST/CNRS. All rts. reserv.

   15490632   PASCAL No.: 02-0185822
   Adaptive and integrated video communication for wireless ATM
   Signal processing X : theories and applications : Tampere, 4-8 September
2000
   VASS Jozsef; XINHUA ZHUANG
   GABBOUJ Moncef, ed; KUOSMANEN Paulti, ed
   Eyeball.com Network Inc., West Vancouver, BC V7T 1A2, Canada; Multimedia
Communications and Visualization Laboratory, Department of Computer
Engineering & Computer Science, Columbia, MO 65211, United States
   European Association for Signal Processing, Unknown; Tampere University
of technology, Tampere, Finland
   EUPSICO 2000 : European signal processing conference, 10   (Tampere FIN)
2000-09-04
   2000 2305-2308
   Publisher: TTKK-Paino, Tampere
   ISBN: 952-15-0443-9 Availability: INIST-Y 33708; 354000097061035670
   No. of Refs.: 14 ref.
   Document Type: C (Conference Proceedings) ; A (Analytic)
   Country of Publication: Finland
   Language: English
   Highly   efficient   and   robust   source   coding,   channel   coding,   and
packetization techniques are proposed for video streaming over wireless
ATM. At the base station, which is located at the boundary of the wireline
and   wireless   networks,   video   received from the wireline source is
dynamically transformed to match both the hardware capabilities of mobile
hosts and the time- **varying** wireless **channel   conditions** . For wireless
transmission, source coding, channel coding, and packetization are jointly
implemented as part of the application. For source coding, we propose to
use our three-dimensional significance-linked connected component analysis
video codec. For channel coding and packetization, both intracell and
interlaced (intercell) forward error correction are applied. Furthermore,
the   time-varying channel characteristics is   exploited by adaptively
allocating the total bit budget between source coding and channel coding.
Extensive performance evaluation demonstrates the .effectiveness of the
proposed wireless video streaming technique.

28/7/44   (Item 2 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2004 INIST/CNRS. All rts. reserv.

14601986   PASCAL No.: 00-0270424
A packet selection algorithm for adaptive transmission of smoothed video over a wireless channel
  Special Issue on Wireless and Mobile Computing and Communications
  ZHIMEI JIANG; KLEINROCK L
  BOUKERCHE Azzedine, ed; DAS Sajal K, ed
  AT & T Labs-Research, Unknown; Computer Science Department, University of California at Los Angeles, United States
  Department of Computer Science, University of North Texas, Denton, Texas 76203-1366, United States; Center for Research in Wireless Mobility and Networking (CReWMaN), The University of Texas at Arlington, Arlington, Texas 76019-0015, United States
  Journal: Journal of parallel and distributed computing, 2000, 60 (4) 494-509
  ISSN: 0743-7315 Availability: INIST-20948; 354000082343960070
  No. of Refs.: 22 ref.
  Document Type: P (Serial) ; A (Analytic)
  Country of Publication: United States
  Language: English
  This paper discusses techniques for transmitting smoothed video more efficiently over a wireless network. The fluctuation of wireless channel conditions can add a significant amount of delay to video packets and cause them to miss their play-out time. If a video is smoothed, it is possible to selectively deliver packets delayed at the base-station to reduce the impact of the missing packets on video quality. In this paper, we present a simple yet effective packet selection algorithm which accomplishes this goal. This algorithm determines whether to transmit a packet **based** on **channel conditions** as well as the likelihood that higher priority layers in the rest of the video will be delivered on time. We introduce the concept of quality index to measure the performance of the algorithm. Results from trace-driven simulations show that the performance of the algorithm is close to optimal under a wide variety of channel conditions when the threshold is set between 0.7 and 0.9.

28/7/45   (Item 3 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2004 INIST/CNRS. All rts. reserv.

14491379   PASCAL No.: 00-0153989
Rate-adaptive indoor infrared wireless communication systems using repeated and punctured convolutional codes
  OHTSUKI T
  Department of Electrical Engineering, Science University of Tokyo, Noda, Chiba 278-8510, Japan; Department of Electrical Engineering and Computer Sciences, University of California at Berkeley, Berkeley, CA 94720, United States
  Journal: IEEE communications letters, 2000, 4 (2) 56-58
  ISSN: 1089-7798 Availability: INIST-26496; 354000082059660070
  No. of Refs.: 5 ref.

Document Type: P (Serial) ; A (Analytic)
Country of Publication: United States
Language: English
We propose a rate-adaptive transmission scheme using repeated and punctured convolutional codes for indoor infrared wireless communications. The proposed system uses a coding scheme consisting of an outer punctured convolutional code and an inner repetition code, and varies code rate, i.e., bit rate adaptively **depending** on **channel conditions** . We show that the proposed system can realize communications in worse channel conditions at the expense of bit rate, while maximizing the throughput available to a user on his position.

 28/7/46   (Item 4 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2004 INIST/CNRS. All rts. reserv.

   13404182   PASCAL No.: 98-0096570
   Variable rate adaptive channel coding for coherent and non-coherent Rayleigh fading channel
   Cryptography and coding : Cirencester, December 17-19, 1997
   LAU V K N; MARIC S V
   DARNELL Michael, ed
   Signal Processing and Communication Group, Department of Engineering, University of Cambridge, CB2 1PZ, United Kingdom
   IMA international conference, 6 (Cirencester GBR) 1997-12-17
   Journal: Lecture notes in computer science, 1997, 1355 180-191
   ISBN: 3-540-63927-6 ISSN: 0302-9743 Availability: INIST-16343; 354000077520340190
   No. of Refs.: 8 ref.
   Document Type: P (Serial); C (Conference Proceedings) ; A (Analytic)
   Country of Publication: Germany; United States
   Language: English
   We have evaluated the information theoretical performance of variable rate adaptive channel coding for the Rayleigh fading channel. The channel states are detected at the receiver and fed back to the transmitter by means of a noiseless feedback **link** . **Based** on the **channel state** informations, the transmitter can adjust the channel coding scheme accordingly. The channel capacity and the error exponent of are evaluated and the optimal control rules are found for coherent and non-coherent Rayleigh fading channel with feedback of channel states. It is shown that the variable rate scheme can only increase the channel error exponent. The effects of peak time constraint and the finite feedback delays are also considered. Finally, we compare the performance of the variable rate adaptive channel coding in high bandwidth-expansion systems (CDMA) and high bandwidth-efficiency systems (TDMA).

 28/7/47   (Item 5 from file: 144)
DIALOG(R)File 144:Pascal
(c) 2004 INIST/CNRS. All rts. reserv.

   09956373   PASCAL No.: 92-0167855
   Improving desig feedback equaliser performance using neural networks
   RAIVIO K; SIMULA O; HENRIKSSON J
   Helsinki univ. technology, lab. computer information sci., Espoo 02150, Finland

Novel equaliser structures combining traditional transversal equalisers and neural computation have been introduced for **adaptive** discrete- **signal** detection. Extensive simulations using a two-path channel model and 16QAM modulation have been run to investigate the performance characteristics of these neural equalisers. The results have shown that they adapt very well to **changing channel conditions** , including both linear multipath and nonlinear distortions. The new structures are superior when compared to the traditional equalisers with equal computational complexity, especially in difficult channels

28/7/48 **(Item 1 from file: 266)**
DIALOG(R)File 266:FEDRIP

00243434
IDENTIFYING NO.: 6212 AGENCY CODE: SBIR
COLOR VIDEO COMPRESSOR FOR TELEMETRY
PRINCIPAL INVESTIGATOR: Jain, A. K.
PERFORMING ORG.: Optivision Inc., 2655 Portage Bay Ave, Davis, CA 95616
SPONSORING ORG.: NAVY
DATES: 1987 FY : 1988 FUNDS: $550,000 (0000000) TYPE OF AWARD: Phase 1 and Phase 2
SUMMARY: THIS IS A PROPOSAL FOR THE DEVELOPMENT OF A COLOR VIDEO REAL-TIME DATA COMPRESSION SYSTEM. THE PROPOSED SYSTEM WILL CONTAIN A TRANSMITTER AND A RECEIVER. THE TRANSMITTER WILL ACCEPT AN NTSC STANDARD COLOR VIDEO SIGNAL, DIGITIZE IT, COMPRESS IT IN REAL-TIME, AND ENCODE IT FOR TRANSMISSION AT USER-SELECTABLE RATES RANGING FROM 10MB/S TO 50 MB/S. THE RECEIVER WILL DECODE AND DECOMPRESS THE DIGITAL BIT STREAM AND **RECONSTRUCT** THE DIGITIZED VIDEO **SIGNAL** FOR DISPLAY. THE PROPOSED PHASE I STUDY WILL RESULT IN A RECOMMENDED COMPRESSION ALGORITHM THAT HAS BEEN OPTIMIZED FOR I) RATE VERSUS **SUBJECTIVE** VISUAL **QUALITY** , II) TELEMETRY **CHANNEL** ERROR EFFECTS, AND III) OTHER CONSTRAINTS RELATED TO REAL TIME OPERATION, SIZE, POWER, MECHANICAL AND ELECTRICAL INTERFACE REQUIREMENTS. PHASE I RESULTS WILL BE ACCOMPANIED BY A SYSTEM-LEVEL HARDWARE ARCHITECTURE AND COMPUTER SIMULATION RESULTS. PHASE II WILL RESULT IN THE FABRICATION OF A PROTOTYPE SYSTEM FOR REAL-TIME DEMONSTRATION.
?

```
Set      Items    Description
S1      591351    SIGNAL? ?
S2       84812    S1(3N)(MODIFY? OR MODIFIE? ? OR MODIFICATION? OR CHANG??? ?
                    OR VARY??? ? OR VARIE? ? OR ADJUST?)
S3       24922    S1(3N)(READJUST? OR ADAPT??? ? OR ADAPTAB? OR ALTER OR ALT-
                    ERS OR ALTERED OR ALTERING OR ALTERATION?)
S4        2250    S1(3N)(EDIT??? ? OR REVIS???? ? OR REDEFIN? OR REPROGRAM? -
                    OR RECONFIGUR? OR  ALTERR?)
S5          81    S1(3N)RE()(CONFIGUR? OR PROGRAM??? ? OR PROGRAMM? OR DEFIN-
                    E? ? OR DEFINI?)
S6       24673    S1(3N)(RESYNTHESI? OR REPRODUC? OR REGENERAT? OR RECREAT? -
                    OR REFORM? OR RECONSTRUCT?)
S7         146    S1(3N)RE()(SYNTHESIS? OR SYNTHESIZ? OR PRODUC????? ? OR FO-
                    RM???? ? OR FORMATION?)
S8         244    S1(3N)RE()(GENERAT???? ? OR CREAT???? ? OR CONSTRUCT?)
S9     1125627    CHANNEL? ? OR LINE OR LINES OR CIRCUIT??? ? OR PATH? ? OR -
                    PATHWAY? ?
S10      65192    S9(2N)(QUALITY OR STATE OR STATES OR CONDITION? ? OR STATU-
                    S? OR MODE OR MODES)
S11    1299500    STRINGEN? OR STANDARD? ? OR THRESHOLD? ? OR CONDITION? ? OR
                    VALUE OR VALUES OR LEVEL? ? OR PROFILE? ? OR PATTERN? ?
S12    1056285    BOUND? ? OR RANGE OR RANGES OR CRITERIA? OR CRITERION? OR -
                    NORM? ? OR MODEL? ? OR RULE OR RULES OR FORMULA?
S13     234506    BASELINE? OR BASE()LINE? ? OR TEMPLATE? OR YARDSTICK? OR Y-
                    ARD()STICK? ? OR BENCHMARK? OR BENCH()MARK??? ? OR TARGET? ?
S14     310582    S11:S13(3N)(MODIFY? OR MODIFIE? ? OR MODIFICATION? OR CHAN-
                    G??? ? OR VARY??? ? OR VARIE? ? OR ADJUST?)
S15      62631    S11:S13(3N)(READJUST? OR ADAPT??? ? OR ADAPTAB? OR ALTER OR
                    ALTERS OR ALTERED OR ALTERING OR ALTERATION?)
S16      10056    S11:S13(3N)(EDIT??? ? OR REVIS???? ? OR REDEFIN? OR REPROG-
                    RAM? OR RECONFIGUR? OR  ALTERR?)
S17        252    S11:S13(3N)RE()(CONFIGUR? OR PROGRAM??? ? OR PROGRAMM? OR -
                    DEFINE? ? OR DEFINI?)
S18       2415    S10(5N)(DEPEND? OR CORRELAT? OR LINK? OR INTERLINK? OR INT-
                    ERELAT? OR INTERRELAT?)
S19       1109    S10(5N)(RELAT?? ? OR RELATING OR RELATION? OR CORELAT? OR -
                    CONTINGEN? OR PREDICAT? OR CIRCUMSCRIB?)
S20       2659    S10(5N)(BASE OR BASED OR BASING OR SUBJECT?)
S21         59    S1(3N)RE()(PROGRAMME? ? OR PROGRAMMING OR RE()(FORM? ? OR -
                    FORMED OR FORMING OR FORMATION? ))
S22         53    S11:S13(3N)RE()(PROGRAMME? ? OR PROGRAMMING)
S23        859    S10(5N)LINK???? ?
S24      18580    (S2:S8 OR S21)(25N)(S14:S17 OR S22)
S25        364    S24(25N)S10
S26          7    S25/TI,AB
S27       1480    IC='G10L-019'
S28        474    IC='G10L-013'
S29       2729    IC='H03M-013'
S30       5977    IC='H04L-001'
S31         17    S25 AND S27:S30
S32       7670    (S2:S8 OR S21)(5N)(SPEECH? OR SPOK? OR SPEAK? OR SOUND OR -
                    AUDIO OR ACOUSTIC?? ? OR PHONIC? ? OR AURAL OR SONIC? ?)
S33         10    S32(25N)S25
S34         30    S26 OR S31 OR S33
S35        106    (S2:S8 OR S21)(5N)ITERATIV?
S36       2505    (S2:S8 OR S21)(5N)(PERIODIC? OR RECURR? OR FREQUENT? OR OC-
```

```
        CASIONAL? OR CONTINUAL? OR REPEAT? OR REPITITIOUS? OR SYSTEMA-
        TIC?)
S37   1601   (S2:S8 OR S21)(5N)CONTINUOUS?
S38      5   S35:S37(25N)S25
S39     99   S2:S8(25N)(S18:S20 OR S23)
S40     11   S39 AND S27:S30
S41     24   S39/TI,AB,CM
S42      6   S39(25N)(S32 OR S35:S37)
S43     39   S38 OR S40:S42
S44     36   S43 NOT S34
S45     36   IDPAT (sorted in duplicate/non-duplicate order)
S46     36   IDPAT (primary/non-duplicate records only)
```

34/5,K/1   (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

01667476
Memory-efficient ADSL transmission in the presence of TCM-ISDN interferers
Speicher-effiziente ADSL-Übertragung bei TCM-ISDN-Storungen
Transmission ADSL econome en memoire en presence d'interferences TCM-ISDN
PATENT ASSIGNEE:
  Texas Instruments Incorporated, (279078), 7839 Churchill Way, Mail
    Station 3999, Dallas, Texas 75251, (US), (Applicant designated States:
    all)
INVENTOR:
  Kratochwil, Konrad W., P.O. Box 231, 94026, Menlo Park, (US)
  Zogakis, Thomas N., 1903 Montecito Ave, 94043, Mountain View, (US)
  Melsa, Peter J., 950 S. Third Street, 49120, Niles, (US)
LEGAL REPRESENTATIVE:
  Holt, Michael et al (50423), Texas Instruments Limited, European Patents
    Department (MS 13), PO Box 5069, Northampton NN4 7ZE, (GB)
PATENT (CC, No, Kind, Date): EP 1370039 A1   031210 (Basic)
APPLICATION (CC, No, Date):   EP 2003101647 030605;
PRIORITY (CC, No, Date): US 386524 P 020605; US 342059 030114
DESIGNATED STATES: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR;
  HU; IE; IT; LI; LU; MC; NL; PT; RO; SE; SI; SK; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK
INTERNATIONAL PATENT CLASS: H04L-027/26; H04L-005/02; H04L-005/14;
  H04L-001/00

ABSTRACT EP 1370039 A1
    A method of communicating data across a channel that experiences
  near-end cross talk (NEXT) interference and far-end cross talk (FEXT)
  interference in alternate intervals. In one embodiment, the method
  comprises: a) determining NF)), the number of bits per symbol usable in a
  FEXT-only mode of operation (306); b) determining NS)), a number of bits
  per symbol usable in a single mode of operation (310); c) determining
  whether the FEXT-only mode or the single mode provides a higher data rate
  (312); and d) configuring a modem to transmit using the mode having a
  higher data rate (316). The FEXT-only mode may be determined to have a
  higher data rate when 126NF)) >340NS)).
ABSTRACT WORD COUNT: 112
NOTE:
  Figure number on first page: //

LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application: 031210 A1 Published application with search report
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
     CLAIMS A (English)   200350   535
     SPEC A   (English)   200350   5336
Total word count - document A   5871
Total word count - document B   0
Total word count - documents A + B   5871

...INTERNATIONAL PATENT CLASS: **H04L-001/00**

...SPECIFICATION is allocated a number of data bits, and the allocation of
  bits may be dynamically **adjusted** as **channel   conditions   change** .
  Each carrier **signal** may also be allocated a small individual gain
  factor to further improve communications performance.

The...

34/5,K/3   (Item 3 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

01437825
Channel estimation and data decisions for multicarrier reception
Kanalschatzung und Datenentscheidung fur Mehrtragerempfang
Estimation de canal et decisions de donnees pour la reception multiporteuse
PATENT ASSIGNEE:
  BRITISH BROADCASTING CORPORATION, (215360), Broadcasting House, London
    W1A 1AA, (GB), (Applicant designated States: all)
INVENTOR:
  Robinson, Adrian Paul, c/o British Broadcast Corp, Res. & Dev Dpt,
    Kingswood Warren, Tadworth, Surrey KT20 6NP, (GB)
LEGAL REPRESENTATIVE:
  Abnett, Richard Charles (27531), REDDIE & GROSE 16 Theobalds Road, London
    WC1X 8PL, (GB)
PATENT (CC, No, Kind, Date): EP 1221793 A2 020710 (Basic)
                              EP 1221793 A3 030910
APPLICATION (CC, No, Date):   EP 2002250062 020107;
PRIORITY (CC, No, Date): GB 100275 010105
DESIGNATED STATES: BE; DE; FI; FR; IT
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: H04L-025/02; H04L-025/06; H04L-027/26;
  H04L-001/00

ABSTRACT EP 1221793 A2
    In a DVB-T receiver, a channel equaliser (110) generates an indirect
  measure of transmission channel state from scattered pilots transmitted
  in the signal, and interpolates (312,316) from these to give channel
  state measurement values for all the carriers. A direct measure of
  transmission channel state is separately obtained from the differences
  (246) between the input values and hard quantised (244) values obtained
  from them, filtered in a symbol recursive filter (260). Each channel
  state measure is applied to a control law circuit (320,280) to provide a
  control signal (348,346). The control signal indicating the poorer
  quality is selected (350) to provide channel state measurement used for
  control. This control signal (354) controls the confidence-level
  discrimination levels of soft-decision quantisers (226) in the main
  signal path.
ABSTRACT WORD COUNT: 126
NOTE:
  Figure number on first page: 6

LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application: 020710 A2 Published application without search report
 Change: 030827 A2 International Patent Classification changed:
                           20030709
 Search Report: 030910 A3 Separate publication of the search report
 Examination: 040506 A2 Date of request for examination: 20040309
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
      CLAIMS A (English)   200228   1158
      SPEC A   (English)   200228   8163
Total word count - document A   9321
Total word count - document B   0

Total word count - documents A + B   9321

...INTERNATIONAL PATENT CLASS: **H04L-001/00**

...SPECIFICATION not further described in detail.
    The quantisers 226a, 226b and 226c all receive a control **signal** which
     adjusts the amplitudes of the discrimination levels in the quantisers
    relative to the received **values** , and thus **changes** the confidence
     level discrimination levels in dependence upon **channel   state** .
    The metric assignment and demapping circuit 112 generates the control
    signal for the quantisers 226...

 34/5,K/5   (Item 5 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01316637
Link adaptation for RT-EGPRS
Verbindungsanpassung fur RT-EGPRS
Adaptation de liaison pour RT-EGPRS
PATENT ASSIGNEE:
  LUCENT TECHNOLOGIES INC., (2143720), 600 Mountain Avenue, Murray Hill,
    New Jersey 07974-0636, (US), (Applicant designated States: all)
INVENTOR:
  Demetrescu, Christian, 50 Fielding Avenue, Twickenham, Middlesex TW2 5LY,
    (GB)
  Samaras, Konstantinos, 53 Montagu Street, Swindon, Wiltshire SN2 2HL,
    (GB)
  Samuel, Louis Gwyn, 82 Standen Way, Abbey Mead, Swindon, Wiltshire SN2
    3YG, (GB)
  Tatesh, Said, 44 Beatrice Street, Swindon, Wiltshire SN2 1BB, (GB)
  Wu, Jian Ju, 32 Huntington Close, Reading, Berkshire, (GB)
LEGAL REPRESENTATIVE:
  Williams, David John (86431), Lucent Technologies UK Limited, 5
    Mornington Road, Woodford Green, Essex IG8 0TU, (GB)
PATENT (CC, No, Kind, Date): EP 1126651 A1 010822 (Basic)
APPLICATION (CC, No, Date):   EP 2000301205 000216;
DESIGNATED STATES: DE; FI; FR; GB; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: **H04L-001/00**

ABSTRACT EP 1126651 A1
    There is disclosed a technique for link adaptation, suitable for a
  packet switched mobile communication system, in which a command or
  request to change the mode of a codec in a transmitter is sent only
  responsive to a change in the condition of a received signal.
ABSTRACT WORD COUNT: 47
NOTE:
  Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application: 010822 A1 Published application with search report
 Examination: 020417 A1 Date of request for examination: 20020209
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
      CLAIMS A (English) 200134   305
      SPEC A   (English) 200134   4300
Total word count - document A   4605

Total word count - document B   0
Total word count - documents A + B   4605

INTERNATIONAL PATENT CLASS: H04L-001/00

...SPECIFICATION the current signal level is different from the previous
   signal level, and thus detects a **change** in **channel conditions** . This
   may manifest, for example, in a variation, such as a deterioration, in
   the received signal strength.
      The detection block determines whether the **change** in the **signal**
   strength is sufficient to justify a change in the codec mode of the
   transmitter at...

   34/5,K/6   (Item 6 from file: 348)

01256430
**Method of generating space-time codes for generalized layered space-time
   architectures**
**Verfahren zur Erzeugung von raum-zeitlichen Koden fur generalisierte Zeit
   und Raum Schichtarchitektur**
**Procede de generation de codes spatio-temporels pour architecture par
   couches temporelle et spatiale generalisee**
PATENT ASSIGNEE:
   Hughes Electronics Corporation, (2464050), 200 N. Sepulveda Boulevard, El
      Segundo, California 90245-0956, (US), (Applicant designated States:
      all)
INVENTOR:
   Hammons, Roger A., Jr., 14074 Saddle River Road, North Potomac, Maryland
      20878, (US)
   El Gamal, Hesham, 898 Deacon Circle, Columbus, Ohio 43214, (US)
LEGAL REPRESENTATIVE:
   Lindner, Michael, Dipl.-Ing. et al (80041), Witte, Weller & Partner,
      Patentanwalte, Postfach 105462, 70047 Stuttgart, (DE)
PATENT (CC, No, Kind, Date): EP 1085688 A2 010321 (Basic)
APPLICATION (CC, No, Date):   EP 115149 000712;
PRIORITY (CC, No, Date): US 153936 990915
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
   LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: H04L-001/06

ABSTRACT EP 1085688 A2
   Space-time codes for use with layered architectures with arbitrary
   numbers of antennas are provided such as rate k/n convolutional codes
   (e.g., rates higher than or equal to 1/n where n is the number of
   transmit antennas). Convolutional codes for layered space-time
   architectures are generated using matrices over the ring F((D)) of formal
   power series in variable D.
ABSTRACT WORD COUNT: 58
NOTE:
   Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application: 010321 A2 Published application without search report
 Change: 010530 A2 Inventor information changed: 20010412
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:

Available Text Language   Update   Word Count
      CLAIMS A (English)   200112   1214
      SPEC A   (English)   200112   2872
Total word count - document A   4086
Total word count - document B   0
Total word count - documents A + B   4086

INTERNATIONAL PATENT CLASS: H04L-001/06

...SPECIFICATION use of diversity techniques in which the receiver is
  afforded multiple replicas of the transmitted **signal** under **varying**
  channel **conditions** .
     Recently, information theoretic studies have shown that spatial
  diversity provided by multiple transmit and/or...

  34/5,K/7   (Item 7 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01233305
Wireless communication system and method having a space-time architecture,
   and receiver for multi-user detection
Funkkommunikationssystem und -Verfahren mit einer Raum-Zeit-Architektur und
   Empfanger fur Mehrbenutzerdetektion
Systeme et methode de communication sans fil avec une architecture par
   couches temporelle et spatiale, et recepteur pour la detection
   d'utilisateurs multiples
PATENT ASSIGNEE:
  Hughes Electronics Corporation, (2464050), 200 N. Sepulveda Boulevard, El
    Segundo, California 90245-0956, (US), (Applicant designated States:
    all)
INVENTOR:
  El Gamal, Hesham, 14220 Oakpointe Drive, Laurel, Maryland 20707, (US)
  Hammons, Roger A.jr., 14074 Saddle River Road, North Potomac, Maryland
    20878, (US)
LEGAL REPRESENTATIVE:
  Lindner, Michael, Dipl.-Ing. et al (80041), Witte, Weller & Partner,
    Patentanwalte, Postfach 105462, 70047 Stuttgart, (DE)
PATENT (CC, No, Kind, Date): EP 1069722 A2 010117 (Basic)
APPLICATION (CC, No, Date):   EP 115142 000712;
PRIORITY (CC, No, Date): US 143293 990712
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: **H04L-001/06**

ABSTRACT EP 1069722 A2
    A threaded space-time (TST) architecture in a multiple antenna wireless
  communication system uses the coded transmission in each layer of a
  transmission resource array as a space-time code. Each layer of a layer
  set is active during all available symbol transmission intervals, and
  each of the transmit antennas are used equally often, such that layers
  each transmit a symbol using a different antenna during each symbol
  transmission interval. A receiver is provided for multi-user reception
  using an iterative, soft-input/soft-output (SISO) multi-user detection
  algorithm based on minimum mean square error (MMSE) criterion, among
  other methods.
ABSTRACT WORD COUNT: 95
NOTE:

Figure number on first page: 1

INTERNATIONAL PATENT CLASS: H04L-001/06

...SPECIFICATION use of diversity techniques in which the receiver is
  afforded multiple replicas of the transmitted **signal** under **varying**
  channel **conditions** . Recently, information theoretic studies have shown
  that spatial diversity provided by multiple transmit and/or...

 34/5,K/12   **(Item 12 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS
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00362852
Active acoustic attenuation system for higher order mode non-uniform sound
    field in a duct.
Aktive Schalldampfungsanordnung fur ein nichtuniformes Schallfeld hoherer
    Ordnung in einem Rohr.
Dispositif d'attenuation acoustique pour un champ acoustique a mode non
    uniforme de plus haut ordre dans un tube.
PATENT ASSIGNEE:
  NELSON INDUSTRIES, INC., (816150), Highway 51 West, Stoughton Wisconsin
    53589, (US), (applicant designated states:
    AT;BE;CH;DE;ES;FR;GB;GR;IT;LI;LU;NL;SE)
INVENTOR:
  Eriksson, Larry J., 5301 Greenbriar Lane, Madison Wisconsin 53714, (US)
  Allie, Mark C., 1702 Bonner Trail, Oregon Wisconsin 53575, (US)
  Hoops, Richard H., 617 Mellum Drive, Stoughton Wisconsin 53589, (US)
LEGAL REPRESENTATIVE:
  Burke, Steven David et al (47741), R.G.C. Jenkins & Co. 26 Caxton Street,
    London SW1H 0RJ, (GB)
PATENT (CC, No, Kind, Date): EP 333461 A2 890920 (Basic)
                              EP 333461 A3 900314
                              EP 333461 B1 930623
APPLICATION (CC, No, Date):   EP 89302561 890315;
PRIORITY (CC, No, Date): US 168932 880316
DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; GR; IT; LI; LU; NL; SE
INTERNATIONAL PATENT CLASS: G10K-011/16;
CITED PATENTS (EP A): GB 2088951 A; US 4665549 A; US 4677677 A
CITED REFERENCES (EP A):
  JOURNAL OF VIBRATION,ACOUSTICS,STRESS, AND RELIABILITY IN DESIGN, vol.
    106, July 1984, pages 399-404, The American Society of Mechanical
    Engineers; J. TICHY et al.: "A study of active control of noise in
    ducts";

ABSTRACT EP 333461 A2
    A system is provided for increasing the frequency range of an active
  acoustic attenuation system in a duct without increasing cut-off

frequency f(sub(c)) of the duct or otherwise splitting or partitioning
the duct into separate ducts or chambers. The frequency range is
increased above f(sub(c)) to include higher order modes. A plurality of
cancelling model sets are provided. Each transverse portion of the
acoustic pressure wave has its own set of an adaptive filter model,
cancelling speaker, and error microphone. A single input microphone may
service all sets.
ABSTRACT WORD COUNT: 94

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Lapse: 020612 B1 Date of lapse of European Patent in a
                              contracting state (Country, date): AT
                              19930623, BE 19930623, CH 19930623, LI
                              19930623, ES 19930623, GR 19930623, NL
                              19930623, SE 19930623,
  Lapse: 20000126 B1 Date of lapse of European Patent in a
                              contracting state (Country, date): AT
                              19930623, BE 19930623, CH 19930623, LI
                              19930623, GR 19930623, NL 19930623, SE
                              19930623,
  Application: 890920 A2 Published application (A1with Search Report
                              ;A2without Search Report)
  Search Report: 900314 A3 Separate publication of the European or
                              International search report
  Examination: 900627 A2 Date of filing of request for examination:
                              900426
  Examination: 911211 A2 Date of despatch of first examination report:
                              911028
  Change: 920805 A2 Representative (change)
  Grant: 930623 B1 Granted patent
  Lapse: 940126 B1 Date of lapse of the European patent in a
                              Contracting State: CH 930623, LI 930623
  Lapse: 940126 B1 Date of lapse of the European patent in a
                              Contracting State: CH 930623, LI 930623
  Lapse: 940302 B1 Date of lapse of the European patent in a
                              Contracting State: CH 930623, LI 930623, SE
                              930623
  Lapse: 940511 B1 Date of lapse of the European patent in a
                              Contracting State: AT 930623, CH 930623, LI
                              930623, SE 930623
  Lapse: 940615 B1 Date of lapse of the European patent in a
                              Contracting State: AT 930623, CH 930623, LI
                              930623, NL 930623, SE 930623
  Oppn None: 940615 B1 No opposition filed
  Lapse: 940622 B1 Date of lapse of the European patent in a
                              Contracting State: AT 930623, BE 930623, CH
                              930623, LI 930623, NL 930623, SE 930623
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
      CLAIMS B (English)   EPBBF1   3363
      CLAIMS B (German)   EPBBF1   2075
      CLAIMS B (French)   EPBBF1   2690
      SPEC B   (English)   EPBBF1   4278
Total word count - document A   0
Total word count - document B   12406
Total word count - documents A + B 12406

...SPECIFICATION poles and zeros, as in the noted incorporated patents. The
   use of poles to model **the** feedback **path** is significant. Individual
   finite impulse response (FIR) filters are not adequate to truly

adaptively cancel direct and feedback noise. Instead, a single infinite impulse response (IIR) filter **is** needed to provide truly **adaptive** cancellation of **the** direct noise and **acoustic** feedback. Thus, each of models 40, 240 and 340 adaptively recursively **models the** acoustic **system** and the feedback path on-line. Since each model is recursive, it provides the IIR...
? t34/5,k/17,20-22;t34/5/23

34/5,K/17 **(Item 17 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS
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00177007
Modem.
Modulator-Demodulator.
Modulateur-demodulateur.
PATENT ASSIGNEE:
  CODEX CORPORATION, (604590), 20 Cabot Boulevard, Mansfield Massachusetts
    02048, (US), (applicant designated states:
    AT;BE;CH;DE;FR;GB;IT;LI;NL;SE)
INVENTOR:
  Qureshi, Shahid U.H., 24 Indian Ridge Road, Natick Massachusetts, (US)
  Seitz, Karl W., Six Quail Run Road, Norfolk Massachusetts, (US)
  Wilson, Robert M., 33 Carl Road, Walpole Massachusetts, (US)
LEGAL REPRESENTATIVE:
  Deans, Michael John Percy et al (30021), Lloyd Wise, Tregear & CO. Norman
    House 105-109 Strand, London WC2R OAE, (GB)
PATENT (CC, No, Kind, Date):   EP 154565   A2   850911 (Basic)
                               EP 154565   A3   870715
                               EP 154565   B1   910925
APPLICATION (CC, No, Date):   EP 85301614 850308;
PRIORITY (CC, No, Date): US 587386 840308
DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; NL; SE
INTERNATIONAL PATENT CLASS: **H04L-001/12** ;   **H04L-001/20**
CITED PATENTS (EP A): US 3536840 A; US 3536840 A; EP 39191 A; EP 39191 A;
  US 3665394 A
CITED REFERENCES (EP A):
  PATENT ABSTRACTS OF JAPAN, vol. 8, no. 107 (E-245) 1544 , 19th May 1984;
    & JP-A-59 23 639 (MATSUSHITA DENKI SANGYO K.K.) 07-02-1984
  IBM TECHNICAL DISCLOSURE BULLETIN, vol. 18, no. 8, January 1976, pages
    2726,2727, New York, US; P.G. BRYANT et al.: "Line quality monitoring
    method";

ABSTRACT EP 154565 A2
    Modem.
    A modem which includes transmission means for transmitting information
  signals to a remote device over a channel at any one of a multiplicity of
  communication rates, reception means for receiving information signals
  from the remote device over the channel at any one of the communication
  rates, quality-monitoring means for monitoring the quality of the channel
  on the basis of the received information signals, and rate control means
  responsive to the quality-monitoring means for selecting a current
  communication rate based on the channel quality, the rate control means
  including fall forward means for indicating that an increase in the
  current communication rate to a higher communication rate is desired and
  for implementing the increase when the remote device concurs.
ABSTRACT WORD COUNT: 121

LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application: 850911 A2 Published application (Alwith Search Report

```
Search Report:      870715 A3 Separate publication of the European or
                               International search report
Examination:        880316 A2 Date of filing of request for examination:
                               880114
Examination:        900110 A2 Date of despatch of first examination report:
                               891129
Grant:              910925 B1 Granted patent
Lapse:              920318 B1 Date of lapse of the European patent in a
                               Contracting State: CH 910925, LI 910925
Lapse:              920513 B1 Date of lapse of the European patent in a
                               Contracting State: CH 910925, LI 910925, SE
                               910925
Lapse:              920715 B1 Date of lapse of the European patent in a
                               Contracting State: AT 910925, CH 910925, LI
                               910925, SE 910925
Oppn None:          920916 B1 No opposition filed
Lapse:              991020 B1 Date of lapse of European Patent in a
                               contracting state (Country, date): AT
                               19910925, CH 19910925, LI 19910925, IT
                               19910925, SE 19910925,
```
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
```
Available Text  Language    Update      Word Count
     CLAIMS B   (English)   EPBBF1        1128
     CLAIMS B   (German)    EPBBF1         994
     CLAIMS B   (French)    EPBBF1        1330
     SPEC B     (English)   EPBBF1        5468
Total word count - document A                0
Total word count - document B             8920
Total word count - documents A + B        8920
```

INTERNATIONAL PATENT CLASS: H04L-001/12 ...

... H04L-001/20

...CLAIMS means further comprises adaptive equalization and demodulation
circuitry for equalizing and demodulating said received information
signals using **adaptive** equalization and demodulation parameters
which have initial values, and said rate control means further
comprises save equalizer means responsive to said quality-monitoring
means and **adapted** to update said **values** when said **channel
quality** is good and to reinitialize said values when said **channel
quality** is poor.
7. A modem according to any preceding claim, wherein said information
signals comprise...

duplicate

 34/5,K/20   (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00989785   **Image available**
METHODS AND ARRANGEMENTS IN A TELECOMMUNICATION SYSTEM RELATED APPLICATIONS
PROCEDES ET AGENCEMENTS RELATIFS A UN SYSTEME DE TELECOMMUNICATION
Patent Applicant/Assignee:
  TELEFONAKTIEBOLAGET LM ERICSSON (PUBL), S-126 25 Stockholm, SE, SE
    (Residence), SE (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
  SJOBERG Johan, Karlbergsvagen 62, 1 tr, S-113 35 Stockholm, SE, SE

(Residence), SE (Nationality), (Designated only for: US)
    BRUHN Stefan, Fridshyddevagen 3, S-191 36 Sollentuna, SE, SE (Residence),
        SE (Nationality), (Designated only for: US)
Legal Representative:
    BERGENSTRAHLE & LINDVALL AB (agent), P.O.Box 17704, S-118 93 Stockholm,
        SE,
Patent and Priority Information (Country, Number, Date):
    Patent: WO 200319850 A1 20030306 (WO 0319850)
    Application: WO 2002SE1510 20020822 (PCT/WO SE0201510)
    Priority Application: SE 20012849 20010822
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
    AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
    EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
    LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI
    SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
    (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR
    (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
    (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
    (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **H04L-001/12**
Publication Language: English
Filing Language: English
Fulltext Availability:
    Detailed Description
    Claims
Fulltext Word Count: 12012

English Abstract
    In adapting the modes of a codec for a communication channel in a mobile
    telecommunication system, a delay unit is provided to delay the
    adaptation if communication conditions of the channel are improving, so
    that a less robust mode having a higher intrinsic quality is selected
    only after some delay. Otherwise the adapting is not delayed. This may to
    some extent reduce the quality of the received speech signal, abut the
    out-of-phase problems due to AMR loop delay in speech codecs are
    minimized. In particular in speech codecs built according to the AMR
    standard. The quality of the communication is measured to give quality
    values for successive measurement occasions. The quality of the
    communication is measured to give quality values for successive
    measurement occasions. The quality values are first linearly filtered.
    The delay unit comprises a plurality of memory cells (X"sub"1, X"sub"2, ,
    X"sub"M) in a memory (810) for storing the quality values of the
    communication conditions of the channel for the most recent measurement
    occasions. A selector (820) operates according to an algorithm (825) for
    selecting one of the memory cells. The content of the selected cell is
    used to set the mode of the codec.

French Abstract
    Lors de l'adaptation des modes d'un codeur-decodeur pour une voie de
    communication dans un systeme de telecommunication mobile, une unite de
    retard est destinee a retarder l'adaptation si les conditions de
    communication de la voie s'ameliorent, si bien qu'un mode moins robuste a
    qualite intrinseque plus elevee n'est selectionne qu'apres un certain
    retard. Autrement, l'adaptation n'est pas retardee. Cela peut dans une
    certaine mesure reduire la qualite du signal vocal recu, mais les
    problemes de dephasage dus au retard de boucle de multidebit adaptatif
    (AMR) dans des codeurs-decodeurs de voix sont reduits a un minimum, en
    particulier dans les codeurs-decodeurs de voix construits selon la norme
    AMR. La qualite de la communication est mesuree afin de donner des

valeurs de qualite aux occasions de mesure successives. Les valeurs de
qualite sont d'abord filtrees de maniere lineaire. L'unite de retard
comporte une pluralite de cellules de memoire (X"sub"1, X"sub"2, ,
X"sub"M) dans une memoire (810) destinee au stockage des valeurs de
qualite des conditions de communication de la voie pour les occasions de
mesure les plus recentes. Un selectionneur (820) fonctionnant selon un
algorithme (825) sert a selectionner l'une des cellules de memoire. Le
contenu de la cellule selectionnee est utilise pour fixer le mode du
codeur-decodeur.

Legal Status (Type, Date, Text)
Publication   20030306 A1 With international search report.
Examination   20030515 Request for preliminary examination prior to end of
                        19th month from priority date

Main International Patent Class: **H04L-001/12**
Fulltext Availability:
  Detailed Description

Detailed Description
... and an increased bit error rate and ultimately results in a bad
  quality of the **reconstructed   speech   signal** .

  The problem is exemplified by the case where the **channel   conditions
  vary** periodically with a period of about twice the AMR loop delay. At
  this critical fluctuation rate of the **channel   condition** , the
  adaptation will be maximally

 34/5,K/21   (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00948510   **Image available**
RADIOCOMMUNICATION EMPLOYING SELECTED SYNCHRONIZATION TECHNIQUE
RADIOCOMMUNICATION FAISANT INTERVENIR LA TECHNIQUE DE SYNCHRONISATION
    SELECTIVE
Patent Applicant/Assignee:
  TELEFONAKTIEBOLAGET LM ERICSSON (publ), SE-126 25 Stockholm, SE, SE
    (Residence), SE (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
  LINDOFF Bengt, Morkullevagen 45, S-237 36 Bjarred, SE, SE (Residence), SE
    (Nationality), (Designated only for: US)
  SINGVALL Jakob, Sodra Esplanaden 18 C, S-223 52 Lund, SE, SE (Residence),
    SE (Nationality), (Designated only for: US)
Legal Representative:
  O'CONNELL David Chistopher (et al) (agent), Haseltine Lake & Co, Imperial
    House, 15-19 Kingsway, London WC2B 6UD, GB,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200282711 A1 20021017 (WO 0282711)
  Application: WO 2002EP3760 20020404   (PCT/WO EP0203760)
  Priority Application: US 2001826967 20010406
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
  EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI
  SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
    (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
    (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **H04L-001/00**
International Patent Class: H04L-007/04; H04L-025/06; H04L-025/02
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 4334

English Abstract
  A method and apparatus for acquiring time synchronization to a received
  signal are described. First, a burst of data which includes a known
  sequence is received. This received signal is processed using a plurality
  of different synchronization techniques. Each synchronization technique
  can be paired with a corresponding channel estimation technique, which
  pairing is predetermined to be optimized for particular channel
  conditions. A processor or model validation unit selects the channel
  estimate associated with the channel conditions currently being
  experienced by the radio signal.

French Abstract
  La presente invention concerne un procede et un dispositif permettant la
  synchronisation de temps d'acquisition d'un signal recu. Tout d'abord, un
  paquet de donnees qui comprend une sequence connue est recu. Ce signal
  recu est traite grace a une pluralite de techniques de synchronisation
  differentes. Chaque technique de synchronisation peut etre appariee a une
  technique d'estimation de canal correspondante, ledit appariement etant
  predetermine pour etre optimal pour des conditions de canal
  particulieres. Un processeur ou une unite de validation de modele
  selectionne le canal issu de l'estimation, associe aux conditions de
  canal auxquelles le signal radio est couramment expose.

Legal Status (Type, Date, Text)
Publication 20021017 A1 With international search report.
Examination   20021114 Request for preliminary examination prior to end of
                       19th month from priority date

Main International Patent Class: **H04L-001/00**
Fulltext Availability:
  Detailed Description

Detailed Description
... the present invention provides receivers with the capability to more
  accurately synchronize to a radio **signal** in **varying   channel**
  conditions , e.g., when the receiver is moving rapidly, when the receiver
  enters a structure, etc...

 34/5,K/22   (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2004 WIPO/Univentio. All rts. reserv.

00924316   **Image available**
APPARATUS AND METHOD FOR OPERATING A SUBSCRIBER INTERFACE IN A FIXED
    WIRELESS SYSTEM
APPAREIL ET PROCEDE PERMETTANT DE FAIRE FONCTIONNER UNE INTERFACE D'ABONNE
    DANS UN SYSTEME SANS FIL FIXE

Patent Applicant/Assignee:
  RAZE TECHNOLOGIES INC, 2540 East Plano Parkway, Suite 188, Plano, TX
    75074, US, US (Residence), US (Nationality)
Inventor(s):
  STRUHSAKER Paul F, 5304 Brouette Court, Plano, TX 75023, US,
  MCKOWN Russell C, 1104 Pittsburg Landing, Richardson, TX 75080, US,
Legal Representative:
  MUNCK William A (et al) (agent), Novakov, Davis & Munck, P.C., 900 Three
    Galleria Tower, 13155 Noel Road, Dallas, TX 75240, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200258413 A2-A3 20020725 (WO 0258413)
  Application: WO 2002IB139 20020118 (PCT/WO IB0200139)
  Priority Application: US 2001262698 20010119; US 2001839729 20010420
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
  EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI
  SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: H04Q-007/20
International Patent Class: **H04L-001/00** ; H04Q-007/30
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 5888

English Abstract
  An apparatus, and an associated method, operates upon bursts of data
  signals received at a base station (110) in a fixed wireless access
  communication system (100). A controller (314) is provided in a base
  transceiver station that is capable of causing cyclo-stationary adaptive
  filtering to be performed upon successive bursts of data signals received
  at the base station (110). The cyclo-stationary filtering is performed to
  facilitate improved speed and accuracy by which the bursts are acted upon
  by the demodulator portion of a modem (302/304) positioned at the base
  station (110).

French Abstract
  L'invention concerne un appareil, et un procede associe, fonctionnant sur
  des salves de signaux de donnees recus au niveau d'une station de base
  (110) dans un systeme de communication (100) a acces sans fil fixe. Une
  unite de commande (314) est disposee dans une station
  emettrice-receptrice de base qui peut provoquer la mise en oeuvre d'un
  filtrage adaptatif cyclo-stationnaire sur des salves successives de
  signaux de donnees recus au niveau de la station de base (110). Ce
  filtrage cyclo-stationnaire est realise de sorte a permettre une vitesse
  et une precision ameliorees de traitement des salves par la partie de
  demodulateur d'un modem (302/304) place au niveau de la station de base
  (110).

Legal Status (Type, Date, Text)
Publication 20020725 A2 Without international search report and to be
                      republished upon receipt of that report.
Search Rpt   20021114 Late publication of international search report

Republication 20021114 A3 With international search report.
Republication 20021114 A3 Before the expiration of the time limit for
                              amending the claims and to be republished in the
                              event of the receipt of amendments.
Examination   20040513 Request for preliminary examination prior to end of
                              19th month from priority date

International Patent Class: H04L-001/00 ...
Fulltext Availability:
  Detailed Description

Detailed Description
... on the uplink
  data signal is improved because the prQfile was updated as
  the data **signal 's channel   conditions   changed** .

  Cyclo-stationary **adaptive** filtering (CSAF) is performed
  upon the uplink data burst signal. CSAF is a signal
  processing...

 34/5/23   (Item 4 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00861649   **Image available**
**AUDIBLE   ERROR DETECTOR AND CONTROLLER UTILIZING CHANNEL QUALITY DATA AND
      ITERATIVE SYNTHESIS**
**DETECTEUR   ET   SUPPRESSEUR   D'ERREURS   AUDIBLES   UTILISANT   DES   DONNEES DE
      QUALITE DU CANAL ET LA SYNTHESE ITERATIVE**
Patent Applicant/Assignee:
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Legal Representative:
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    755 Main Street, P.O. Box 224, Monroe, CT 06468, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200195313 A1 20011213 (WO 0195313)
  Application: WO 2001IB965 20010604 (PCT/WO IB0100965)
  Priority Application: US 2000209860 20000607
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
  ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
  LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
  TR TT TZ UA UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: G10L-019/00
International Patent Class: H04L-001/00 ; H04L-001/20 ; H03M-013/45
Publication Language: English

Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 4659

English Abstract
  An apparatus and method for detecting and controlling audible errors in a
  sound communication system at the receiver utilizes channel quality data
  and also iterative synthesis. Errors occurring in synthesized speech are
  detected by searching for atypical sound with a stringency dependent upon
  channel **quality** . The greater the **channel** **quality** deficiency is,
  the higher the typically standards will be. Errors are controlled by
  either **re** – **synthesizing** the **signal** in an interative way using
  typically **standards** which **vary** with **channel** **quality** deficiency,
  or by **modifying** the output **signal** using typicality **standards** which
  vary with **channel** **quality** deficiency, or both.

French Abstract
  Cette invention se rapporte a un appareil et a un procede servant a
  detecter et a supprimer les erreurs audibles dans un systeme de
  communication sonore au niveau du recepteur et qui utilisent a cet effet
  des donnees de qualite du canal ainsi que la synthese iterative. Les
  erreurs se produisant dans une parole synthetisee sont detectees par
  recherche des sons atypiques avec une rigueur qui depend de la qualite du
  canal. Plus la deficience de la qualite du canal est grande, plus les
  normes de typicite sont elevees. Les erreurs sont supprimees par
  resynthese du signal en mode iteratif a l'aide de normes de typicite qui
  varient avec la deficience de la qualite du canal et/ou par modification
  du signal de sortie a l'aide de normes de typicite qui varient avec la
  deficience de la qualite du canal.

Legal Status (Type, Date, Text)
Publication   20011213 A1 With international search report.
Publication   20011213 A1 Before the expiration of the time limit for
                        amending the claims and to be republished in the
                        event of the receipt of amendments.
? t34/5,k/25-27,29

 34/5,K/25   (Item 6 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00802010   **Image available**
**METHOD   AND   APPARATUS   FOR   TRANSMISSION   AND   RECEPTION   OF   FM   IN-BAND
    ON-CHANNEL DIGITAL AUDIO BROADCASTING**
**PROCEDE   ET   APPAREIL DE TRANSMISSION ET DE RECEPTION DE FM DANS UN SYSTEME
    DE   RADIODIFFUSION   AUDIO   NUMERIQUE   SUR   VOIE DE TRANSMISSION DANS LA
    BANDE**
Patent Applicant/Assignee:
  IBIQUITY DIGITAL CORPORATION, Suite 202, 8765 Stanford Boulevard,
    Columbia, MD 21045, US, US (Residence), US (Nationality)
Inventor(s):
  KROEGER Brian William, 12813 Amberwoods Way, Sykesville, MD 21784, US,
  BAIRD Jeffrey S, 10882 Olde Woods Way, Columbia, MD 21044, US,
Legal Representative:
  LENART Robert P (agent), Eckert Seamans Cherin & Mellott, LLC, 44th
    floor, 600 Grant Street, Pittsburgh, PA 15219, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200135556 A2-A3 20010517 (WO 0135556)

Application: WO 2000US42061 20001110   (PCT/WO US0042061)
Priority Application: US 99438148 19991110
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
   AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
   ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
   LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
   TR TT TZ UA UG UZ VN YU ZA ZW
   (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
   (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
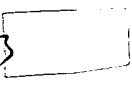   (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
   (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: H04H-001/00
International Patent Class: H04L-027/26; **H04L-001/00**
Publication Language: English
Filing Language: English
Fulltext Availability:
   Detailed Description
   Claims
Fulltext Word Count: 6642

English Abstract
   A method for transmission of data in a digital audio broadcasting system
   includes the steps of providing a plurality of orthogonal frequency
   division multiplexed sub-carriers, with the sub-carriers including data
   sub-carriers and reference sub-carriers, and modulating the data
   sub-carriers with a digital signal representative of information to be
   transmitted. The reference sub-carriers are modulated with a sequence of
   timing bits, wherein the sequence of timing bits includes an unambiguous
   block synchronization word, and the number of bits comprising the block
   synchronization word is less than one half of the number of bits in said
   timing sequence. Then the orthogonal frequency division multiplexed
   sub-carriers are transmitted. Receivers that differentially detect the
   block synchronization word and use the block synchronization word to
   coherently detect the digital signal representative of information to be
   transmitted are also included.

French Abstract
   L'invention concerne un procede de transmission de donnees dans un
   systeme de radiodiffusion audio numerique consistant a fournir une
   pluralite de sous-porteuses multiplexees a division de frequence
   orthogonale, lesdites sous-porteuses comprenant des sous-porteuses de
   donnees et des sous-porteuses de reference, et a moduler les
   sous-porteuses de donnees par un signal numerique representatif des
   informations a transmettre. Les sous-porteuses de reference sont modulees
   par une sequence de bits de synchronisation, cette sequence comprenant un
   mot de synchronisation des blocs non ambigu, et le nombre de bits
   comprenant le mot de synchronisation des blocs etant inferieur a la
   moitie du nombre de bits dans ladite sequence de synchronisation. Les
   sous-porteuses multiplexees a division de frequence orthogonale sont
   alors transmises. L'invention prevoit egalement des recepteurs qui
   detectent de facon differentielle le mot de synchronisation des blocs et
   utilisent ce dernier pour detecter de facon coherente le signal numerique
   representatif des informations a transmettre.

Legal Status (Type, Date, Text)
Publication 20010517 A2 Without international search report and to be
                          republished upon receipt of that report.
Examination   20010907 Request for preliminary examination prior to end of
                        19th month from priority date

Search Rpt   20011004 Late publication of international search report
Republication 20011004 A3 With international search report.

...International Patent Class: **H04L-001/00**
Fulltext Availability:
  Detailed Description

Detailed Description
... QPSK subcarrier symbols is employed to minimize losses over the
  channel. Since the interference and **signal   levels   vary** over the
  subcarriers (frequency) and time due to selective fading, timely **channel
    state** 1 5 information (CSI) is needed to adaptively adjust the
  weighting for the soft-symbols...

 34/5,K/26   **(Item 7 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT
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00504399   **Image available**
ELECTRONIC COMMUNICATIONS SYSTEM AND METHOD
PROCEDE ET SYSTEME DE COMMUNICATIONS ELECTRONIQUE
Patent Applicant/Assignee:
  POCKETSCIENCE INC,
Inventor(s):
  PERETZ Neil M,
  FULLAM Scott F,
  CHEN Zong Bo,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9935751 A1 19990715
  Application: WO 99US410 19990107   (PCT/WO US9900410)
  Priority Application: US 983203 19980107
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM
  HR HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX
  NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM
  KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI
  FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD
  TG
Main International Patent Class: **H03M-013/00**
International Patent Class: **H04L-001/18**
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 17782

English Abstract
  A system for communicating data between a computer (20) and a unit
  remote (22) from the computer (22) is provided, comprising receiving
  input information from a user in the remote unit (22) and for producing
  data signals corresponding to the input information, producing error
  corrected message signals from the data signals, generating acoustical
  tones corresponding to the error corrected message signals, communicating
  said acoustical tones over a first communications link (24), said first
  communications link (24) being bi-directional so that the remote unit
  (22) communicates data with the computer (20), and receiving acoustic
  tones over said first communications link (24) from the computer (20),

the acoustical tones being adjusted for the conditions of the first
communication link (24) prior to transmission to the remote unit (22).
The remote unit (22) may also receive data from the computer (20) over a
second communications link (36), which is independent of the first
communications link (24) so that the remote unit receives data from two
different communications links.

French Abstract

    L'invention porte sur un systeme permettant de transmettre des donnees
entre un ordinateur (20) et une unite situee a distance (22) de
l'ordinateur (22). Ce systeme comprend des informations d'entree
provenant d'un utilisateur de l'unite a distance (22) et permet de
generer des signaux de donnees correspondant aux informations d'entree,
des signaux de messages de correction d'erreur provenant des signaux de
donnees, des tonalites acoustiques correspondant aux signaux de messages
de correction d'erreur, de transmettre ces tonalites acoustiques sur une
premiere liaison (24) de communications, cette premiere liaison (24)
etant bidirectionnelle de sorte que l'unite a distance (22) communique
des donnees avec l'ordinateur (20), et de recevoir sur cette premiere
liaison (24) de communications des tonalites acoustiques provenant de
l'ordinateur (20), les tonalites acoustiques etant ajustees aux etats de
la premiere liaison (24) de communications avant de realiser une
transmission vers l'unite a distance (22). L'unite a distance (22) peut
egalement recevoir des donnees provenant de l'ordinateur (20) sur une
seconde liaison (36) de communications, independante de la premiere (24),
de facon a recevoir des donnees des deux liaisons de communications
differentes.

Main International Patent Class: **H03M-013/00**
International Patent Class: **H04L-001/18**
Fulltext Availability:
  Detailed Description

Detailed Description
... error corrected data. The adjustments based on the incoming signal may
    also be used to **adjust** the **signal** transmitter 538 so that the data
    being transmitted to the handheld unit may be pre- **adjusted** for the
    line conditions . Thus, the signals received by the handheld unit from
    the server should appear unaffected by the **line conditions** since the
    signal have already been pre-adjusted for the line conditions. In this
    manner...

 34/5,K/27   (Item 8 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00437218   **Image available**
**RECEIVER DECODER CIRCUITRY, AND ASSOCIATED METHOD, FOR DECODING A CHANNEL
    ENCODED SIGNAL**
**CIRCUITS RECEPTEUR-DECODEUR ET PROCEDE AFFERENT AUX FINS DU DECODAGE DE
    SIGNAL CODE DE CANAL**
Patent Applicant/Assignee:
  ERICSSON INC,
Inventor(s):
  KHAYRALLAH Ali S,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9827682 A1 19980625
  Application: WO 97US22864 19971212 (PCT/WO US9722864)

Priority Application: US 96767542 19961216
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM
  GW HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX
  NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM
  KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR
  GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Main International Patent Class: **H04L-001/20**
International Patent Class: H04L-01:00
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 5763

English Abstract

  Decoder circuitry, and an associated method, decodes an encoded signal
  received at a receiver. A determination is made of the levels of
  distortion introduced upon a signal during its transmission to a receiver
  upon a nonideal communication channel. If the communication channel
  introduces moderate amounts of distortion upon the signal, a complex
  decoding technique such as a standard trellis decoding technique is
  utilized to decode the signal. If the channel is determined to introduce
  only small levels of distortion upon the signal, a relatively simple,
  decoding technique is instead utilized.

French Abstract

  Ce circuit decodeur et le procede afferent permettent un decodage de
  signal code recu par un recepteur. Il est procede a une determination des
  niveaux de distorsion introduits sur un signal durant la transmission de
  celui-ci vers un recepteur via un canal de communication non-ideal. Si le
  canal de communication introduit des distorsions de niveau modere sur le
  signal, une technique de decodage complexe, un decodage en treillis
  normalise notamment, est utilisee pour decoder le signal. S'il s'avere
  que le canal n'introduit que des niveaux reduits de distorsion, il est
  fait appel a une technique de decodage relativement simple.

Main International Patent Class: **H04L-001/20**
Fulltext Availability:
  Detailed Description

Detailed Description
... technique. The plot
  18 is formed by plotting the bit error rate of a decoded
  signal responsive to **changing   channel   conditions** utilizing
  a simple decoding technique, such as a right inverse
  matrix operation corresponding to, and...

 34/5,K/29   **(Item 10 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT
(c) 2004 WIPO/Univentio. All rts. reserv.

00400918   **Image available**
SOURCE/CHANNEL ENCODING MODE CONTROL METHOD AND APPARATUS
PROCEDE ET APPAREIL DE COMMANDE DE MODE DE CODAGE DE SOURCE/VOIE
Patent Applicant/Assignee:
  TELEFONAKTIEBOLAGET LM ERICSSON (publ),
Inventor(s):

EKUDDEN Erik,
MINDE Tor Bjorn,
HELLWIG Karl,
SUNDQVIST Jim,

English Abstract
  A source/channel encoding mode control method in a TDMA radio
  communication system determines (20) the current type of source signal to
  be encoded and transmitted, restricts (22) encoding to a class of
  source/channel encoding modes compatible with the determined type of
  source signal, determines (24) a quality measure for previously
  transmitted signals that have been received and decoded, and selects
  (30), based on the quality measure, the most suitable source/channel
  encoding mode for the determined class.

French Abstract
  Ce procede de commande de mode de codage de source/voie dans un systeme
  de radiocommunication AMRT determine (20) le type courant du signal
  source a coder et a transmettre, limite (22) le codage a une categorie de
  modes de codage de source/voie compatible avec le type de signal source
  determine, determine (24) une mesure de qualite pour des signaux transmis
  precedemment qui ont ete recus et decodes et selectionne (30), en
  fonction de la mesure de qualite, le mode de codage de source/voie le
  plus approprie pour la categorie determinee.

Detailed Description
... of source and channel encoding algorithm. That is, regardless of the
  changing character of the **speech   signal** and the **changing** radio
  conditions an allocated source/ **channel** encoding is **mode** will be
  maintained for the duration of a call.

  However, for certain input source signals...

46/5,K/4   (Item 4 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01430673
Circuit arrangement for detecting the state of at least one electrical actuating element
Schaltungsanordnung zur Erfassung des Zustandes von mindestens einem elektrischen Betatigungselement
Disposition de circuit pour detecter l'etat d'au moins un element d'actuation electrique
PATENT ASSIGNEE:
  SIEMENS AKTIENGESELLSCHAFT, (200520), Wittelsbacherplatz 2, 80333 Munchen
  , (DE), (Applicant designated States: all)
INVENTOR:
  Murr, Robert, Emmeramsweg 11, 93092 Barbing, (DE)
PATENT (CC, No, Kind, Date): EP 1209477 A2 020529 (Basic)
APPLICATION (CC, No, Date):   EP 2001119846 010816;
PRIORITY (CC, No, Date): DE 10047907 000927
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: G01R-031/28

ABSTRACT EP 1209477 A2 (Translated)
    Switching element condition detecting circuit in motor vehicle, detects
switching condition of MOSFETs, **based** on which operating **state** of
circuit is **changed** and output **signal** is emitted
    The N-channel MOSFETs (S1-S4) connected to a signal input (IN) has
different contact resistances (R7-R9,R5) in a switched-on state. The
MOSFETs change the active/inactive operating state of the circuit based
on its switching condition. A signal output (OUT) emits an output signal,
when the MOSFETs are in the active operating state.
TRANSLATED ABSTRACT WORD COUNT: 78

ABSTRACT EP 1209477 A2
    Schaltungsanordnung zur Erfassung des Zustandes von mindestens einem
elektrischen Betatigungselement (S1, S2, S3, S4), mit einem Signaleingang
(IN) zur Aufnahme eines den Zustand des Betatigungselements (S1, S2, S3,
S4) wiedergebenden Eingangssignals, einem Signalausgang (OUT) zur Abgabe
eines den Zustand des Betatigungselements (S1, S2, S3, S4) wiedergebenden
Ausgangssignals, einem Steuerausgang zur Abgabe eines Aktivierungssignals
(WAKE-UP-SIGNAL) fur eine Auswertungseinheit ((mu)C), um die
Auswertungseinheit ((mu)C) von einem inaktiven Betriebszustand in einen
aktiven Betriebszustand zu versetzen, sowie einer eingangsseitig mit dem
Signaleingang (IN) und ausgangsseitig mit dem Steuerausgang verbundenen
Steuereinheit (C1, D1, R6) zur Erzeugung des Aktivierungssignals
(WAKE-UP-SIGNAL) in Abhangigkeit von dem Eingangssignal, wobei das an dem
Signaleingang (IN) anliegende Eingangssignal ein analoges Signal ist,
wobei die Steuereinheit das Aktivierungssignal (WAKE-UP-SIGNAL) fur die
Auswertungseinheit ((mu)C) erzeugt, wenn das Eingangssignal innerhalb
eines vorgegebenen Wertebereichs liegt.
ABSTRACT WORD COUNT: 131
NOTE:
  Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application: 020529 A2 Published application without search report
LANGUAGE (Publication,Procedural,Application): German; German; German

FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
       CLAIMS A   (German) 200222   465
       SPEC A   (German) 200222   1691
Total word count - document A   2156
Total word count - document B   0
Total word count - documents A + B   2156

...ABSTRACT Translated)
   Switching element condition detecting circuit in motor vehicle, detects
  switching condition of MOSFETs, **based** on which operating **state** of
  circuit is **changed** and output **signal** is emitted
   The N-channel MOSFETs (S1-S4) connected to a signal input (IN) has...

 46/5,K/6   (Item 6 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01272884
Spread code allocation method and base station in CDMA cellular network
Verfahren   zur   Zuweisung von Spreizkodes und Basisstation in einem
     zellularem Netzwerk
Methode d'allocation de codes d'etalement et station de base dans un reseau
     cellulaire
PATENT ASSIGNEE:
  NEC CORPORATION, (236690), 7-1, Shiba 5-chome, Minato-ku, Tokyo, (JP),
     (Applicant designated States: all)
INVENTOR:
  Furukawa, Hiroshi, NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo,
     (JP)
  Ushirokawa, Akihisa, NEC Corporation, 7-1, Shiba 5-chome, Minato-ku,
     Tokyo, (JP)
LEGAL REPRESENTATIVE:
  VOSSIUS & PARTNER (100314), Siebertstrasse 4, 81675 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 1096710 A2   010502 (Basic)
                              EP 1096710 A3   030903
APPLICATION (CC, No, Date):   EP 2000123393 001031;
PRIORITY (CC, No, Date): JP 99311603 991101
DESIGNATED STATES: DE; FI; FR; GB; IT; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: H04J-013/00; H04B-007/26; **H04L-001/00**

ABSTRACT EP 1096710 A2
   A spread code allocation method in a CDMA cellular having a first code
  set including a plurality of first codes and a second code set including
  one or a plurality of second codes, allocating the second code to the
  first code set and multiplying the plurality of first codes by the
  allocated second code to generate a plurality of combined codes,
  assigning a priority to the combined code for each transmission signal to
  be transmitted from a base station to a mobile station, allocating the
  combined code to the transmission signal based on the priority, and
  diffusing the transmission signal by the allocated combined code to
  transmit the diffused transmission signal to the mobile station.
ABSTRACT WORD COUNT: 116
NOTE:
  Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application: 010502 A2 Published application without search report

Search Report: 030903 A3 Separate publication of the search report
Examination: 030924 A2 Date of request for examination: 20030729
Examination: 040102 A2 Date of dispatch of the first examination
                               report: 20031112
Change: 040630 A2 Title of invention (German) changed: 20040513
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
     CLAIMS A   (English)   200118   3512
     SPEC A   (English)   200118   9449
Total word count - document A   12961
Total word count - document B   0
Total word count - documents A + B   12961

...INTERNATIONAL PATENT CLASS: H04L-001/00

...SPECIFICATION Then, a combined code having a higher priority is given
   preference for allocation to transmission **signals** . Here, **change** a
   priority for each transmission **signal** . More specifically, **change** a
   priority for each transmission signal **based** on **channel** **quality**
   value information and required quality value information from a mobile
   station.
     In the following, a...

 46/5,K/7   (Item 7 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01146056
Symbol synchronisation for multicarrier signals
Synchronisierung von Symbolen fur Mehrtragersignale
Synchronisation de symboles pour signaux multiporteurs
PATENT ASSIGNEE:
  MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216880), 1006, Ohaza Kadoma,
    Kadoma-shi, Osaka 571-8501, (JP), (Applicant designated States: all)
INVENTOR:
  Sudo, Hiroaki, 508, Saeda-cho, Tsuzuki-ku, Yokohama-shi, Kanagawa
    224-0054, (JP)
LEGAL REPRESENTATIVE:
  Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721)
   , Maximilianstrasse 58, 80538 Munchen, (DE)
PATENT (CC, No, Kind, Date): EP 999676   A2   000510 (Basic)
                              EP 999676   A3   020904
APPLICATION (CC, No, Date):   EP 99121877 991104;
PRIORITY (CC, No, Date): JP 98316699 981106
DESIGNATED STATES: DE; FR; GB; SE
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: H04L-027/26
ABSTRACT EP 999676 A2
    Delay circuits 409 and 410 delay a digital baseband signal received by
  one symbol. Complex multiplier 411 performs a complex multiplication
  using the received digital baseband signal and the signal delayed by
  delay circuits 409 and 410. Of the multiplication result of complex
  multiplier 411, second accumulator 412 outputs the value resulting from
  an accumulation of the multiplication result of the phase reference
  symbol in the received digital baseband signal and that of the last half
  of the synchronization symbol in the delayed signal to frequency offset
  detector 413.
ABSTRACT WORD COUNT: 90
NOTE:

Figure number on first page: 4

...CLAIMS to claim 1, comprising:
   quality measuring means(1201) for measuring channel quality of a
       reception **signal** ; and
   accumulation period **change** means(1202-1204) for changing the length of
       the frequency offset accumulation period **based** on the **channel**
       quality measured.
   4. The OFDM communication apparatus according to claim 1, comprising
       averaging means(1501) for...

...method according to claim 7, comprising the steps of:
   measuring channel quality of a reception **signal** ; and
     changing the length of the frequency offset accumulation period **based**
       on the **channel** **quality** measured.

 46/5,K/8   (Item 8 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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01134537
Setting of quantisation levels in multicarrier receivers
Einstellung von Quantisierungspegeln in Mehrtragerempfangern
Etablissement de seuils de quantification dans des recepteurs multiporteurs
PATENT ASSIGNEE:
  BRITISH BROADCASTING CORPORATION, (215360), Broadcasting House, London
    W1A 1AA, (GB), (Applicant designated States: all)
INVENTOR:
  Stott, Jonathan Highton, c/o BBC R&D, Kingswood Warren, Tadworth,
    Surrey, KT20 6 NP, (GB)
  Robinson, Adrian Paul, c/o BBC R&D, Kingswood Warren, Tadworth, Surrey,
    KT20 6NP, (GB)
  Haffenden, Oliver Paul, c/o BBC R&D, Kingswood Warren, Tadworth,
    Surrey, KT20 6NP, (GB)
  Clarke, Christopher Keith Perry, c/o BBC R&D, Kingswood Warren,
    Tadworth, Surrey, KT20 6NP, (GB)
  Mitchell, Justin David, c/o BBC R&D, Kingswood Warren, Tadworth,
    Surrey, KT20 6NP, (GB)
LEGAL REPRESENTATIVE:
  Abnett, Richard Charles (27531), REDDIE & GROSE 16 Theobalds Road, London
    WC1X 8PL, (GB)
PATENT (CC, No, Kind, Date): EP 991239 A2   000405 (Basic)
                              EP 991239 A3   030820
APPLICATION (CC, No, Date):   EP 99307679 990929;

PRIORITY (CC, No, Date): GB 9821385 981001
DESIGNATED STATES: BE; DE; FR; GB; IT
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: H04L-027/26; H04L-025/06; H04L-027/38

ABSTRACT EP 991239 A2
    A measurement of channel state is obtained for each carrier of a COFDM
    signal and is used to vary the discrimination levels of a soft-decision
    quantiser (26) which feeds a Viterbi decoder (30). The channel state
    information is obtained from the 64-QAM signal by quantising the input
    with a hard-decision quantiser (44 - Figure 5) and obtaining the
    difference between the quantised and unquantised signal (46,48). The
    channel state information is applied through a symbol-delay recursive
    filter (64) to a control circuit (80). The output of the control circuit
    directly controls the soft-decision quantisers (26) by varying their
    discrimination levels. The control circuit includes a logarithm circuit
    (84 - Figure 7) and a multiply-by-two circuit (90). The method is
    applicable to receivers for digital audio broadcasting (DAB) or digital
    video broadcasting (DVB-T) signals.
ABSTRACT WORD COUNT: 134
NOTE:
    Figure number on first page: 8

LEGAL STATUS (Type, Pub Date, Kind, Text):
 Change: 030820 A2 International Patent Classification changed:
                         20030701
 Application: 20000405 A2 Published application without search report
 Search Report: 030820 A3 Separate publication of the search report
 Examination: 040421 A2 Date of request for examination: 20040220
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
     CLAIMS A   (English) 200014   1086
     SPEC A   (English) 200014   3928
Total word count - document A   5014
Total word count - document B   0
Total word count - documents A + B   5014

...CLAIMS 80) coupled to the output of the channel state determining means
     for providing a control **signal** for **adjusting** the relative
     amplitudes of the discrimination levels used in the quantising means
     and the received values as received at the input in **dependence** upon
     the **channel** **condition** as measured by the channel state
     determining means.
  8. Apparatus according to claim 7, further...

 46/5,K/9   **(Item 9 from file: 348)**
DIALOG(R)File 348:EUROPEAN PATENTS
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01062646
**Transmission power control apparatus and method and radio communication
    apparatus and method**
**Vorrichtung und Verfahren zur Steuerung der Sendeleistung und
    Funkkommunikationssystem und Funkkommunikationsverfahren**
**Dispositif et procede de controle de puissance d'emission et systeme et
    procede de radiocommunication**
PATENT ASSIGNEE:
 MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD., (216880), 1006, Ohaza Kadoma,

Kadoma-shi, Osaka 571-8501, (JP), (Proprietor designated states: all)
INVENTOR:
  Miya, Kazuyuki, 1132-22, Kamiaso, Asao-ku, Kawasaki-shi, Kanagawa
    215-0021, (JP)
  Hayashi, Masaki, 2-505, Heim Hikari no Oka, 6-2 Hikari no Oka,
    Yokosuka-shi, Kanagawa 239-0847, (JP)
  Kitade, Takashi, 6-2-903, Hikari no Oka, Yokosuka-shi, Kanagawa 239-0847,
    (JP)
LEGAL REPRESENTATIVE:
  Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721)
    , Maximilianstrasse 58, 80538 Munchen, (DE)
PATENT (CC, No, Kind, Date):   EP 936752 A1 990818 (Basic)
                                EP 936752 B1 020605
APPLICATION (CC, No, Date):   EP 99102405 990208;
PRIORITY (CC, No, Date): JP 9844429 980210
DESIGNATED STATES: DE; FR; GB
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: H04B-007/005
CITED PATENTS (EP B): EP 665657 A; EP 683570 A; EP 717508 A; DE 19725438 A;
  US 5604730 A; US 5689815 A

ABSTRACT EP 936752 A1
    The transmission power control apparatus includes a section (101) for
  calculating the reception power of a desired radio wave from the received
  signal, section (102) for storing the reception power above, section
  (105) for storing past transmission power, section (103) for demodulating
  the control signal periodically included in the received signal and
  section (104) for determining the transmission power set value above, and
  determines a transmission power set value using the past transmission
  power, reception power of the desired radio wave and the control signal.
ABSTRACT WORD COUNT: 86
NOTE:
  Figure number on first page: 3
LEGAL STATUS (Type, Pub Date, Kind, Text):
  Change: 010418 A1 Title of invention (German) changed: 20010227
  Examination: 20000202 A1 Date of dispatch of the first examination
                              report: 19991215
  Oppn None: 030528 B1 No opposition filed: 20030306
  Change: 010425 A1 Title of invention (French) changed: 20010306
  Change: 010425 A1 Title of invention (English) changed: 20010306
  Change: 010425 A1 Title of invention (German) changed: 20010306
  Change: 010418 A1 Title of invention (English) changed: 20010227
  Change: 010418 A1 Title of invention (French) changed: 20010227
  Grant: 020605 B1 Granted patent
  Application: 990818 A1 Published application with search report
  Examination: 991201 A1 Date of request for examination: 19991005
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
      CLAIMS A (English)   199933   909
      CLAIMS B (English)   200223   683
      CLAIMS B (German)   200223   562
      CLAIMS B (French)   200223   852
      SPEC A   (English)   199933   6773
      SPEC B   (English)   200223   6746
Total word count - document A   7683
Total word count - document B   8843
Total word count - documents A + B   16526

...CLAIMS measuring means(802) for measuring the line quality from the
    demodulation results of the received **signal** and **change** means(804)

for changing target values such as the reception power and SIR **based**
on the **line** **quality** measurement result.
12. A transmission power control method, comprising the steps of
storing the reception...

46/5,K/12   (Item 12 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

00790403
**Wireless base station for cellular radio telephone system with channel
quality indication**
**Schnurlose Feststation fur zellulare Funktelefonanordnung mit Anzeige der
Qualitat des Kanals**
**Station de base fixe sans fil pour un systeme de radiotelephone cellulaire
avec indication de la qualite de canal**
PATENT ASSIGNEE:
  Nokia Corporation, (3988870), Keilalahdentie 4, 02150 Espoo, (FI),
    (Proprietor designated states: all)
INVENTOR:
  Saunders, Robert Stanley, Flat 3, 35 Upper Park Road, Camberley, Surrey
    GU15 2EG, (GB)
LEGAL REPRESENTATIVE:
  Haws, Helen et al (72995), Nokia IPR Department, Nokia House, Summit
    Avenue, Farnborough, Hampshire GU14 0NG, (GB)
PATENT (CC, No, Kind, Date):   EP 736983   A2   961009 (Basic)
                               EP 736983   A3   001227
                               EP 736983   B1   021023
APPLICATION (CC, No, Date):   EP 96302107 960327;
PRIORITY (CC, No, Date): GB 9507146 950406
DESIGNATED STATES: AT; DE; FR; IT; NL; SE
INTERNATIONAL PATENT CLASS: H04B-007/26; H04B-007/212; H04B-007/155
CITED PATENTS (EP B): EP 274857 A; EP 302455 A

ABSTRACT EP 736983 A2
    A wireless base station operating in a system in which wireless base
  stations are used to provide a link between a remote fixed part and a
  handset and method of operation of the same. The wireless base station
  prevents unnecessary handover initiation by the handset in the event
  that the link between the wireless base station and remote fixed part is
  poor. (see image in original document)
ABSTRACT WORD COUNT: 79
NOTE:
  Figure number on first page: 1

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Change: 001227 A2 International Patent Classification changed:
                               20001107
  Application: 961009 A2 Published application (A1with Search Report
                               ;A2without Search Report)
  Oppn None: 031015 B1 No opposition filed: 20030724
  Grant: 021023 B1 Granted patent
  Assignee: 020313 A2 Transfer of rights to new applicant: Nokia
                               Corporation (3988870) Keilalahdentie 4 02150
                               Espoo FI
  Examination: 010822 A2 Date of request for examination: 20010627
  Search Report: 001227 A3 Separate publication of the search report
  Examination: 020306 A2 Date of dispatch of the first examination
                               report: 20020118

Change: 020731 A2 Designated contracting states changed 20020611
Change: 021106 B1 Legal representative(s) changed 20020918
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text   Language   Update   Word Count
        CLAIMS A   (English) EPAB96   929
        CLAIMS B   (English) 200243   961
        CLAIMS B   (German)   200243   947
        CLAIMS B   (French)   200243   1170
        SPEC A   (English) EPAB96   4138
        SPEC B   (English) 200243   4098
Total word count - document A   5068
Total word count - document B   7176
Total word count - documents A + B   12244
...CLAIMS A wireless base station according to any preceding claim wherein ⟍
     the means for transmitting an **adapted** **signal** comprises means for ⟍
     providing a signal capable of providing information on the **quality** ⟍
     of the **channel** between the wireless **base** station and the radio ⟋
     handset.
   7. A wireless base station according to any preceding claim...

...A method according to any one of claims 13 to 16 wherein the step of
     adapting a **signal** comprises providing a signal capable of
     providing information on the **quality** of the **channel** between the
     wireless **base** station and the radio handset.
   18. A method according to any one of claims 13...

...CLAIMS base station (5;6) according to any preceding claim wherein the
     means for transmitting an **adapted** **signal** comprises means for
     providing a signal capable of providing information on the **quality**
     of the **channel** between the wireless **base** station and the radio
     handset.
   7. A wireless base station (5;6) according to any...

...A method according to any one of claims 13 to 16 wherein the step of
     adapting a **signal** comprises providing a signal capable of
     providing information on the **quality** of the **channel** between the
     wireless **base** station (5;6) and the radio handset (7).
   18. A method according to any one...
? t46/5,k/19,23-27,29

 46/5,K/19   (Item 19 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
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00221380
Line terminating apparatus.
Leitungsabschlusseinrichtung.
Dispositif terminal de ligne.
PATENT ASSIGNEE:
  PLESSEY OVERSEAS LIMITED, (286650), Vicarage Lane, Ilford Essex IGI 4AQ,
    (GB), (applicant designated states: BE;CH;DE;FR;IT;LI;NL;SE)
INVENTOR:
  Priest, Christopher Charles Andrew, Flat 2 Guildersfield Hill Road,
    Taplow Berkshire, (GB)
  Walker, Ian, 12 Dunwood Court Boyne Valley Road, Maidenhead Berkshire,
    (GB)
  Hancock, Steven, 34 Learmonth Grove, Edinburgh EH4 1BW, (GB)
LEGAL REPRESENTATIVE:
  Sorenti, Gino , Intellectual Property Department The Plessey Company plc

```
      2-60 Vicarage Lane, Ilford Essex IG1 4AQ, (GB)
PATENT (CC, No, Kind, Date):   EP 211675  A2   870225 (Basic)
                               EP 211675  A3   890426
APPLICATION (CC, No, Date):   EP 86306169 860808;
PRIORITY (CC, No, Date): GB 8520034 850809
DESIGNATED STATES: BE; CH; DE; FR; IT; LI; NL; SE
INTERNATIONAL PATENT CLASS: H04Q-011/04; H04M-019/00;
CITED PATENTS (EP A): GB 2120044 A
CITED REFERENCES (EP A):
  ELECTRICAL COMMUNICATION, vol. 56, no. 2/3, 1981, pages 218-234, New
    York, US; M. VAN BRUSSEL: "ITT 1240 digital exchange application to the
    local network"
  IEEE SPECTRUM, vol. 17, no. 6, June 1980, pages 30-33, IEEE, New York,
    US; D.K. MELVIN: "LSI helps telephones go digital"
  AT & T TECHNICAL JOURNAL, vol. 64, no. 1, part 2, January 1985, pages
    153-173, AT & T, New York, US; L.A. BAXTER et al.: "Communications and
    control architecture"
  BRITISH TELECOMMUNICATIONS ENGINEERING, vol. 3, no. 4, January 1985,
    pages 241-244, London, GB; R.C. WARD: "System X: Digital subscriber
    switching subsystem";
```

ABSTRACT EP 211675 A2
    To provide facilities to handle many different types of customer line
which may be connected to a telephone exchange each line circuit includes
adjustable terminating and amplifying devices responsive to signals
received from a control unit to adjust (e.g.) line terminating impedance
and gain. The line circuits are grouped together with associated group
multiplexers and address decoding facilities. Stored parameters held by
the control unit may be dynamically updated in response to changes in
line condition detected by power feed circuitry in the line circuits, the
power feed circuitry being arranged to provide a constant current feed to
the line pair and to send AGC signals reflecting increased or decreased
line resistance by way of the respective group multiplexer to the control
unit. Other facilities of the apparatus include provision of calling
signals to line and the provision of subscriber private metering (SPM)
signals. Each pulse of dialled digits is detected in the line circuit and
multiplexed to the control unit which accumulates the dialled digits
forwarding each complete digit to the communications exchange.
ABSTRACT WORD COUNT: 178

LEGAL STATUS (Type, Pub Date, Kind, Text):
 Application: 870225 A2 Published application (A1with Search Report
                             ;A2without Search Report)
 Search Report: 890426 A3 Separate publication of the European or
                             International search report
 Examination: 891227 A2 Date of filing of request for examination:
                             891027
 Withdrawal: 900328 A2 Date on which the European patent application
                             was withdrawn: 900103
*Withdrawal: 900404 A2 Date on which the European patent application
                             was withdrawn (change): 900103
LANGUAGE (Publication,Procedural,Application): English; English; English
FULLTEXT AVAILABILITY:
Available Text Language   Update   Word Count
      CLAIMS A (English)   EPABF1   1040
      SPEC A   (English)   EPABF1   4610
Total word count - document A   5650
Total word count - document B   0
Total word count - documents A + B   5650

  ...CLAIMS terminating apparatus as claimed in claim 1 wherein the stored

data parameters include data parameters **relating** to loop
conditions of each **line** pair.
3. Line terminating apparatus as claimed in claim 2 wherein said data
parameters relating to loop conditions are used to **adjust**
amplification of **signals** received from or sent to said line pairs.
4. Line terminating apparatus as claimed in...

46/5,K/23   **(Item 23 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT

01028864   **Image available**
METHOD AND APPARATUS FOR A MIMO-OFDM COMMUNICATION SYSTEM
ATTRIBUTION DE RESSOURCES POUR SYSTEMES DE COMMUNICATION MIMO-OFDM
Patent Applicant/Assignee:
  QUALCOMM INCORPORATED, 5775 Morehouse Drive, San Diego, CA 92121, US, US
    (Residence), US (Nationality)
Inventor(s):
  WALTON Jay Rod, 7 Ledgewood Drive, Westford, MA 01886, US,
  KETCHUM John W, 37 Candleberry Lane, Harvard, MA 01451, US,
  WALLACE Mark, 4 Madel Lane, Bedford, MA 01730, US,
  MEDVEDEV Irina, 68 Liberty Avenue, #2, Somerville, MA 02114, US,
Legal Representative:
  WADSWORTH Philip R (et al) (agent), QUALCOMM Incorporated, 5775 Morehouse
    Drive, San Diego, CA 92121, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200358871 A1 20030717 (WO 0358871)
  Application: WO 2002US41756 20021231 (PCT/WO US0241756)
  Priority Application: US 200242529 20020108
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
  EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG
  SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
  (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SI SK
  TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **H04L-001/06**
International Patent Class: H04L-005/02
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 32869

English Abstract
  Techniques to assign terminals for data transmission in a MIMO-OFDM
  system. A scheduler forms sets of terminals, called a hypothesis, for
  data transmission for each of a number of frequency bands. One or more
  sub-hypotheses may be further formed for each hypothesis, with each
  sub-hypothesis corresponding to (1) specific assignments of transmit
  antennas to the terminal(s) in the hypothesis, or, (2) a specific order
  for processing the uplink data transmissions from the terminal(s). The
  performance of each sub-hypothesis is then evaluated. One sub-hypothesis
  is then selected for each frequency band based on the evaluated

performance, and, the set of terminals in each selected sub-hypothesis are then scheduled for data transmission on the corresponding frequency band.

French Abstract
  L'invention porte sur des techniques de programmation de terminaux pour la transmission de donnees sur la liaison descendante et/ou montante d'un systeme MIMO-OFDM en fonction des "signatures" spatiales et ou de frequence des terminaux. Un programmateur forme un ou plusieurs ensembles de terminaux pour une eventuelle transmission de donnees (liaison descendante ou montante) pour chaque bande d'un nombre de bandes de frequence. Une ou plusieurs sous-hypotheses peuvent egalement etre etablies pour chaque hypothese, chaque sous-hypothese correspondant a (1) des affectations specifiques d'antennes de transmission aux terminaux de l'hypothese (pour la liaison descendante) ou (2) un ordre specifique pour le traitement des transmissions de donnees par liaison montante depuis le ou les terminaux (pour la liaison montante). La performance de chaque sous-hypothese est ensuite evaluee (par exemple, sur la base d'une ou plusieurs mesures de performance). Une sous-hypothese est ensuite selectionnee pour chaque bande de frequence sur la base de la performance evaluee, et le ou les terminaux de chaque sous-hypothese evaluee sont ensuite programmes pour la transmission de donnees sur la bande de frequence correspondante.

Legal Status (Type, Date, Text)
Publication   20030717 A1 With international search report.
Publication   20030717 A1 Before the expiration of the time limit for
                          amending the claims and to be republished in the
                          event of the receipt of amendments.
Correction   20031113 Corrected version of Pamphlet front pages: under
                          (54) published title replaced by correct title under
                          (57) published abstract replaced by correct abstract
Republication 20031113 A1 With international search report.
Examination   20031211 Request for preliminary examination prior to end of
                          19th month from priority date

Main International Patent Class: **H04L-001/06**
Fulltext Availability:
  Claims

Claim
... in the hypothesis being evaluated and the input signals for each subsequent iteration are the **modified   signals** from a preceding iteration.

  22 The method of claim 1, wherein each hypothesis is evaluated **based** in part on **channel   state** information (CSI) for each terminal in the hypothesis.

  23 The method of claim 22, wherein...

 46/5,K/24   (Item 24 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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01019317   **Image available**
COMMUNICATION USING SIMULTANEOUS ORTHOGONAL SIGNALS
**PROCEDE   DE   COMMUNICATION   FAISANT   INTERVENIR   DES   SIGNAUX   ORTHOGONAUX
    SIMULTANES**
Patent Applicant/Assignee:

NORTEL NETWORKS LIMITED, 2351 Boulevard Alfred-Nobel, St. Laurent, Quebec
   H4S 2A9, CA, CA (Residence), CA (Nationality)
Inventor(s):
   STEER David G, 10 Cypress Court, Nepean, Ontario K2H 8Z8, CA,
   TEO Koon Hoo, 9 Northgate Street, Nepean, Ontario K2G 6C7, CA,
   KIRKLAND William R, 22 Bon Echo Cr., (Kanata), Ottawa, Ontario K2M 2W5,
   CA,
Legal Representative:
   SMART & BIGGAR (agent), Attn: FAGGETTER, Ronald, D., 438 University
   Avenue, Suite 1500, Box 111, Toronto, Ontario M5G 2K8, CA,
Patent and Priority Information (Country, Number, Date):
   Patent: WO 200349355 A1 20030612 (WO 0349355)
   Application: WO 2002CA1433 20020918 (PCT/WO CA0201433)
   Priority Application: US 2001998193 20011203
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
   AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
   EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
   LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI
   SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
   (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR
   (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
   (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
   (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: H04L-005/14
International Patent Class: H04B-001/40
Publication Language: English
Filing Language: English
Fulltext Availability:
   Detailed Description
   Claims
Fulltext Word Count: 10855

English Abstract
   Wireless communication is improved by simultaneously transmitting signals
   that are orthogonal to received signals. This technique is referred to as
   Orthogonal Division Duplexing or ODD. Channel characteristics may be
   estimated based on an analysis of the received signals. Subsequently,
   techniques used in the transmitting of **signals** may be **adjusted** based
   on the estimated channel characteristics. By using interleaved pilot
   sub-carriers, each end of a communications **link** may take measurements
   of **channel   conditions** . These measurements may be used to adapt the
   transmission techniques used in the transmitter to the measured channel
   conditions. Advantageously, this adaptation can occur without the delay
   in reporting conditions that is characteristic of traditional adaptive
   communications systems.

French Abstract
   L'invention concerne un procede de communication sans fil ameliore qui
   consiste a emettre, lors de la reception de signaux, des signaux qui
   sont orthogonaux aux signaux recus. Cette technique est communement
   designee sous le terme de duplexage par repartition orthogonale ou ODD.
   Le procede consiste, par ailleurs, a evaluer les caracteristiques de la
   voie de communication, sur la base d'une analyse des signaux recus. Les
   techniques utilisees ensuite pour l'emission des signaux peuvent etre
   adaptees sur la base des caracteristiques obtenues. Le procede fait
   egalement intervenir des sous-porteuses pilotes entrelacees permettant a
   chaque borne d'une liaison de communication de mesurer l'etat des voies
   de communication. Ces mesures peuvent etre utilisees pour adapter les
   techniques de transmission utilisees dans l'emetteur a l'etat des voies

de communication. Avantageusement, cette adaptation peut se faire sans induire de decalages, ce qui est propre aux systemes adaptatifs de communication traditionnels.

Legal Status (Type, Date, Text)
Publication 20030612 A1 With international search report.
Examination   20030925 Request for preliminary examination prior to end of
                19th month from priority date

English Abstract
   ...based on an analysis of the received signals. Subsequently,
   techniques used in the transmitting of **signals** may be **adjusted** based
   on the estimated channel characteristics. By using interleaved pilot
   sub-carriers, each end of a communications **link** may take measurements
   of **channel conditions** . These measurements may be used to adapt the
   transmission techniques used in the transmitter to...

 46/5,K/25   **(Item 25 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT

01011175   **Image available**
MULTIPLE-ACCESS MULTIPLE-INPUT MULTIPLE-OUTPUT (MIMO) COMMUNICATION SYSTEM
SYSTEME DE COMMUNICATION A SORTIES MULTIPLES, A ENTREES MULTIPLES (MIMO) ET
    A ACCES MULTIPLES
Patent Applicant/Assignee:
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    (Residence), US (Nationality)
Inventor(s):
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Legal Representative:
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Patent and Priority Information (Country, Number, Date):
  Patent: WO 200341300 A1 20030515 (WO 0341300)
  Application: WO 2002US35364 20021105 (PCT/WO US0235364)
  Priority Application: US 2001993087 20011106
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
  EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI
  SK SL TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW
  (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: H04B-007/06
International Patent Class: H04B-007/08; **H04L-001/06**
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 42100

English Abstract

Techniques to achieve better utilization of the available resources and
robust performance for the downlink and uplink in a multiple-access MIMO
system. Techniques are provided to adaptively process data prior to
transmission, based on channel state information, to more closely match
the data transmission to the capacity of the channel. Various receiver
processing techniques are provided to process a data transmission
received via multiple antennas at a receiver unit. Adaptive reuse schemes
and power back-off are also provided to operate the cells in the system
in a manner to further increase the spectral efficiency of the system
(e.g., reduce interference, improve coverage, and attain high
throughput). Techniques are provided to efficiently schedule data
transmission on the downlink and uplink. The scheduling schemes may be
designed to optimize transmissions (e.g., maximize throughput) for single
or multiple terminals in a manner to meet various constraints and
requirements.

French Abstract
  L'invention concerne des techniques permettant de realiser une meilleure
  utilisation des ressources disponibles et la performance de robustesse de
  liaisons montante et descendante dans un systeme MIMO a acces multiples.
  Ces techniques permettent de traiter de facon adaptative des donnees
  avant emission, sur la base d'une information d'etat de canal, afin de
  faire correspondre plus precisement l'emission de donnees a la capacite
  du canal. Differentes techniques de traitement de recepteur permettent de
  traiter une emission de donnees, recue a une unite de reception, via des
  antennes multiples. Des schemas de reutilisation adaptatives et des
  reductions de puissance permettent aussi de faire fonctionner les
  cellules du systeme de maniere a augmenter l'efficacite spectrale du
  systeme (par exemple, reduction d'interference, amelioration de
  couverture, et obtention de debit eleve). Des techniques permettent
  encore de programmer efficacement l'emission de donnees sur les liens
  montant et descendant. Les schemas de programmation peuvent etre concus
  afin d'optimiser les emissions (par exemple, maximisation de debit) pour
  des terminaux uniques ou multiples de maniere a satisfaire a des besoins
  et a des contraintes varies.

Legal Status (Type, Date, Text)
Publication   20030515 A1 With international search report.
Examination   20030807 Request for preliminary examination prior to end of
                        19th month from priority date

...International Patent Class: **H04L-001/06**
Fulltext Availability:
  Detailed Description

Detailed Description
...   estimated channel characteristics may then be reported back to the
  transmitter unit and used to **adjust** the **signal** processing (e.g.,
  coding, modulation, and so on). In this manner, high perfon-nance is
  achieved **based** on the determined **channel   conditions** .

  [11161 If the number of receive antennas is equal to or exceeds the
  number of...

 46/5,K/26   (Item 26 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

01001035   **Image available**
METHOD   AND   APPARATUS   FOR   REDUCING   INTERFERENCE   IN

MULTIPLE-INPUT-MULTIPLE-OUTPUT (MIMO) SYSTEMS
PROCEDE ET APPAREIL POUR REDUIRE LES INTERFERENCES DANS DES SYSTEMES A
    ENTREES MULTIPLES ET SORTIES MULTIPLES

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  WINTERS Jack Harriman, 103 Old Wagon Road, Middletown, NJ 07748, US,
Legal Representative:
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    Middletown, NJ 07748-4110, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200330377 A2-A3 20030410 (WO 0330377)
  Application: WO 2002US30556 20020926 (PCT/WO US02030556)
  Priority Application: US 2001325730 20010928; US 2002255441 20020926
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH GM
  HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX
  NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW
  (EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LU MC NL PT SE SK TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: H04B-007/06
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 9445

English Abstract
  Interference is reduced with a multiple-input-multiple-output (MIMO)
  system having a set of basestations including a first basestation (11)
  and a second basestation (171) is reduced. Signals associated with the
  first basestation having its own antenna elements are received. The
  first basestation is associated with its own mobile stations each having
  their own antenna elements (113 and 115). Signals associated with the
  second basestation having its own antenna elements are received. The
  second basestation is associated with its own mobile stations (173 and
  175) each having their own antenna elements. Signals associated with the
  first basestation are jointly detected in conjunction with the signals
  associated with the second basestation to produce a set of detected
  signals.

French Abstract
  L'invention porte sur la reduction des interferences dans un systeme a
  entrees multiples et sorties multiples possedant un ensemble de stations
  de bases comprenant une premiere et une seconde station de base. Le
  procede consiste a recevoir des signaux associes a la premiere station de
  base possedant ses propres elements d'antenne, la premiere station de
  base etant associee a ses propres stations mobiles possedant chacune
  leurs propres elements d'antennes. Chaque signal associe a la premiere
  station de base est uniquement associe a une station mobile associee a la
  premiere station de base. Le procede consiste egalement a recevoir des

signaux associes a la seconde station de base possedant ses propres
elements d'antenne, la seconde station de base etant associee a ses
propres stations mobiles possedant chacune leurs propres elements
d'antenne. Chaque signal associe a la seconde station de base est
uniquement associe a une station mobile associee a la seconde station de
base. Le procede consiste ensuite a detecter conjointement les signaux
associes a la premiere station de base et ceux associes a la seconde
station de base de facon a produire un ensemble de signaux detectes.

Legal Status (Type, Date, Text)
Publication   20030410 A2 Without international search report and to be
                          republished upon receipt of that report.
Search Rpt   20040401 Late publication of international search report
Republication 20040401 A3 With international search report.

Fulltext Availability:
  Claims

Claim
... plurality of antenna elements, the
   signal from the first basestation having its own data, the **signal**
   10 being **modified   based** on a **channel   state** for a second
   basestation;
   receiving, at the plurality of antenna elements, a signal from
   a...its own plurality of antenna elements , comprising:
   - 31
   5 an encoder, the encoder configured to **modify** a **signal** sent
   to the first mobile station **based** on a **channel   state** of the first
   mobile
   station to produce a **modified   signal** ; and
   a plurality of antenna elements coupled to the encoder, the
   plurality of antenna elements...

 46/5,K/27   (Item 27 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00944037   **Image available**
**METHOD AND APPARATUS FOR UTILIZING CHANNEL STATE INFORMATION IN A WIRELESS
    COMMUNICATION SYSTEM**
**PROCEDE ET APPAREIL DESTINES A UTILISER UNE INFORMATION D'ETAT DE CANAL
    DANS UN SYSTEME DE COMMUNICATIONS HERTZIENNES**
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Legal Representative:
  WADSWORTH Philip R (et al) (agent), Qualcomm Incorporated, 5775 Morehouse
    Drive, San Diego, CA 92121-1714, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200278211 A2-A3 20021003 (WO 0278211)
  Application: WO 2002US8733 20020322 (PCT/WO US0208733)
  Priority Application: US 2001816481 20010323
Designated States:

(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
  EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI
  SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: H04B-007/08
International Patent Class: H04B-007/06; **H04L-001/06**
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 13103

English Abstract
  Techniques for transmitting data from a transmitter unit to a receiver
  unit in a multiple-input multiple-output (MIMO) communication system. In
  one method, at the receiver unit, a number of signals are received via a
  number of receive antennas, with the received signal from the transmitter
  unit. The received signals are processed to derive channel state
  information (CSI) indicative of characteristics of a number of
  transmission channels used for data transmission. The CSI is transmitted
  back to the transmitter unit. At the transmitter unit, the CSI from the
  receiver unit is received and data for transmission to the receiver units
  is processed based on the received CSI.

French Abstract
  L'invention concerne des procedes d'emission de donnees d'un emetteur a
  un recepteur dans un systeme de communication multi-antennaires a
  l'emission et a la reception (MIMO). Dans un procede, cote recepteur, un
  certain nombre de signaux sont recus via un certain nombre d'antennes de
  reception, le signal recu par chaque antenne de reception comprenant une
  combinaison d'un ou de plusieurs signaux provenant de l'emetteur. Les
  signaux recus sont traites afin d'obtenir une information d'etat de canal
  (CSI) indicatrice des caracteristiques d'un nombre de canaux d'emission
  utilises pour l'emission de donnees. L'information d'etat de canal est
  reemise vers l'emetteur. Cote emetteur, l'information d'etat de canal du
  recepteur est recue et les donnees a emettre vers les recepteurs sont
  traitees sur la base de l'information d'etat de canal recue.

Legal Status (Type, Date, Text)
Publication   20021003 A2 Without international search report and to be
                             republished upon receipt of that report.
Examination   20030109 Request for preliminary examination prior to end of
                             19th month from priority date
Search Rpt   20030227 Late publication of international search report
Republication 20030227 A3 With international search report.

...International Patent Class: **H04L-001/06**
Fulltext Availability:
  Detailed Description

Detailed Description
... data transmission. The CSI is then reported back to the transmitter
  system and used to **adjust** the **signal** processing (e.g., coding,
  modulation, and so on). In this manner, high performance is achieved

based on the determined **channel conditions** .

[1008] A specific embodiment of the invention provides a method for transmitting data from a...estimated channel characteristics may then be reported back to the transmitter system and used to **adjust** the **signal** processing (e.g., coding, modulation, and so on). In this manner, high perfonnance is achieved **based** on the determined **channel conditions** . The receiver processing techniques described herein include a channel correlation matrix inversion (CCMI) technique, an...

46/5,K/29   (Item 29 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00909272   **Image available**
METHOD OF RECONFIGURATION OF RADIO PARAMETERS BASED ON COMMUNICATION CHANNEL MONITORING
PROCEDE DE RECONFIGURATION DE PARAMETRES RADIO POUR COMMUNICATIONS A COMPATIBILITE ET ADAPTATION DE PUISSANCE
Patent Applicant/Assignee:
  INNOVATIVE TECHNOLOGY LICENSING LLC, Mail Code A15, P.O. Box 1085,
    Thousand Oaks, CA 91358-0085, US, US (Residence), US (Nationality)
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    Charles Drive, Thousand Oaks, CA 91360, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200243341 A2-A3 20020530 (WO 0243341)
  Application: WO 2001US47698 20011026 (PCT/WO US0147698)
  Priority Application: US 2000243707 20001026; US 200155261 20011025
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
  EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK
  SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: H04L-025/02
International Patent Class: H04L-025/03; **H04L-001/00 ; H04L-001/20 ;**
  H04B-007/005
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 5079

English Abstract
  The invention monitors a communication channel and estimates its characteristics from time to time, thus providing a dynamic estimate of channel characteristics. Based on the channel characteristics, a control processor calculates a preferred configuration of digital (and optionally, analog) signal processing to best manage the available energy for the present channel characteristics. The selected configuration is

then down-loaded into communication modules stored in extra memory during runtime. The communication modules preferably include a one or more of: a reconfigurable forward error correcting codec (with adjustable code lengths and a plurality of code choices); a reconfigurable interleaver with adjustable depth; a decision feedback equalizer (DFE) with a reconfigurable number of taps; maximum likelihood sequence estimator with an adjustable number of states; a frequency hopping coder with an adjustable number of hops or hop rate; and a direct-sequence (or direct sequence spread spectrum) codec with an adjustable number of chips per bit.

French Abstract
L'invention controle une voie de communication et estime ses caracteristiques de temps en temps, procurant ainsi une estimation dynamique des caracteristiques de la voie. Sur la base des caracteristiques de la voie, un processeur de commande calcule une configuration preferee du traitement du signal numerique (et facultativement analogique) afin de gerer au mieux l'energie disponible pour les caracteristiques de la presente voie. La configuration selectionnee est ensuite telechargee dans des modules de communication stockes dans une memoire supplementaire pendant la duree d'execution. Les modules de communication comprennent de preference un ou plusieurs des elements suivants: un codec de correction d'erreurs sans voie de retour reconfigurable (avec des longueurs de code ajustables et une pluralite de choix de code); un entrelaceur reconfigurable a profondeur reglable; un egaliseur a decision retroactive (DFE) dote d'un certain nombre de prises reconfigurable; un estimateur de sequence de probabilite maximum presentant un certain nombre d'etats reglable; un codeur a saut de frequence ayant un nombre de sauts ou rythme de saut adaptable; et un codec de sequence directe (ou etalement de spectre de sequence directe) ayant un nombre adaptable de puces par bit.

Legal Status (Type, Date, Text)
Publication   20020530 A2 Without international search report and to be
                          republished upon receipt of that report.
Examination   20021017 Request for preliminary examination prior to end of
                          19th month from priority date
Search Rpt   20030227 Late publication of international search report
Republication 20030227 A3 With international search report.
Search Rpt   20030227 Late publication of international search report
Correction   20030403 Corrections of entry in Section 1: under (30)
                          replace "Not furnished" by "10/055,261"
Republication 20030403 A3 With international search report.

...International Patent Class: **H04L-001/00** ...

... **H04L-001/20**
Fulltext Availability:
  Claims

Claim
  1 A method of adaptively reconfiguring a radio architecture for power efficient or adaptive communications **based** on. communication **channel conditions** , suitable for use in a reconfigurable radio which allows control of **reconfigurable** digital **signal** processing blocks with **adjustable** parameters, comprising the steps of: estimating the signal to noise ratio (SNR) and signal to...
? t46/5,k/30-36

DIALOG(R)File 349:PCT FULLTEXT

00889536   **Image available**
METHODS AND APPARATUS FOR TRANSMITTING INFORMATION BETWEEN A BASESTATION AND MULTIPLE MOBILE STATIONS
PROCEDES ET APPAREIL PERMETTANT DE TRANSMETTRE DES INFORMATIONS ENTRE UNE STATION DE BASE ET DES STATIONS MOBILES MULTIPLES
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Patent Applicant/Inventor:
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  LAROIA Rajiv, 455 Somerville Road, Basking Ridge, NJ 07920, US, US (Residence), IN (Nationality), (Designated only for: US)
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Legal Representative:
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Patent and Priority Information (Country, Number, Date):
  Patent: WO 200223743 A2-A3 20020321 (WO 0223743)
  Application: WO 2001US28322 20010912 (PCT/WO US0128322)
  Priority Application: US 2000232928 20000915; US 2000691766 20001018
Designated States:
(Protection type is "patent" unless otherwise stated - for applications prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
  EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR
  LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL
  TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: H04Q-007/38
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 10564
English Abstract
  Methods and apparatus for scheduling mobile stations (MSs) to download data and/or to control the rate of downloading to an MS from a base station (BS) as a function of downlink channel condition information are described. Artificial channel variations, which can be measured at the MS, and feedback to a BS for scheduling purposes, are introduced through the use of two or more transmitter antennas at a BS. Each of the antennas transmits a signal at the same frequency having the same information content, e.g., modulated data. However the signals are mode to differ with time in their phase and/or amplitude. Multiple signals having the same transmission frequency and information content are received and interpreted as a single composite signal by a receiving MS. The interaction of the received signals and the intentional variations introduced into the signals result an MS detecting different signal amplitudes and/or phases over time even when the total amount of power

used to transmit the combination of the signals having the same
information content remains constant with time. Data transmission rates
are controlled in some embodiments as a function of channel conditions,
e.g., the better the channel conditions the faster the transmission data
rate used. By varying the data rate as a function of channel conditions
and by preferring MSs with good channel conditions to those with bad
channel conditions, improved overall throughput can be achieved by a BS
with regard to downlinks as compared to known systems.

French Abstract
La presente invention concerne des procedes et un appareil permettant de
programmer des stations mobiles (MS) pour telecharger des donnees et/ou
pour commander le debit de telechargement d'une MS a une station de base
(BS) en fonction des informations des conditions du canal de liaison
descendante. Des modifications de canal artificielles, qui peuvent etre
mesurees a la MS, et une information de retour a la BS pour des raisons
de programmation, sont introduites via au moins deux antennes d'emetteur
a la BS. Chacune de ces antennes emet un signal de meme contenu (par
exemple des donnees modulees),a la meme frequence. Cependant ces signaux
sont concus pour differer dans le temps dans leur phase et/ou amplitude.
De multiples signaux possedant la meme frequence d'emission et le meme
contenu sont recus et interpretes comme un signal composite unique par
une MS de reception. L'interaction des signaux recus et les modifications
intentionnelles introduites dans ces signaux font qu'une MS detecte des
amplitudes et/ou des phases de signal differentes dans le temps meme
quand la quantite d'energie totale utilisee pour emettre la combinaison
des signaux de meme contenu reste constante dans le temps. Dans certains
modes de realisation de l'invention, les debits de transmission de
donnees sont commandes en fonction des conditions de canal, par exemple
meilleures sont les conditions de canal, plus rapide est le debit de
transmission de donnee utilise. En variant le debit des donnees en
fonction des conditions de canal et en preferant les MS avec de bonnes
conditions de canal par rapport a celles qui en ont de mauvaises, une BS
ameliore les rendements pour ce qui concerne ses liaisons descendantes si
on compare ces rendements a ceux des systemes connus.

Legal Status (Type, Date, Text)
Publication   20020321 A2 Without international search report and to be
                         republished upon receipt of that report.
Examination   20021121 Request for preliminary examination prior to end of
                         19th month from priority date
Search Rpt   20030515 Late publication of international search report
Republication 20030515 A3 With international search report.

Fulltext Availability:
  Claims

Claim
... period in 5 time during which the relative amplitudes of the first and
  second data **signals** are 6 **varied** . 1 26. The method of claim 25,
  wherein N is greater than two. 1 27. A communications method, comprising
  the steps of
  2 operating a **base** station to receive **channel** **condition** information
  3 from each of a plurality of mobile stations, the channel condition
  information 4...

 46/5,K/31   (Item 31 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT

00873200   **Image available**
MULTICARRIER TRANSMISSION USING POLARIZED ANTENNAE
**TRANSMISSION ADAPTATIVE EN POLARISATION DOUBLE DE SIGNAUX PAR MULTIPLEXAGE
    FREQUENTIEL ORTHOGONAL**
Patent Applicant/Assignee:
  AT & T WIRELESS SERVICES INC, 7277 164th Avenue, NE, Redmond, WA 98052,
    US, US (Residence), US (Nationality)
Inventor(s):
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  HIRANO Michael R, 9309 138 Court, NE, Redmond, WA 98052, US,
  HOOLE Elliott, 22207 NE 28th Place, Redmond, WA 98053, US,
  LO Titus, 10501 181st Avenue, NE, Redmond, WA 98052, US,
Legal Representative:
  MEADOR Terrance A (et al) (agent), Gray Cary Ware & Freidenrich, 4365
    Executive Drive, Suite 1100, San Diego, CA 92121-2133, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200207371 A2-A3 20020124 (WO 0207371)
  Application: WO 2001US18993 20010613 (PCT/WO US0118993)
  Priority Application: US 2000616128 20000714
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  BR CA MX
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
Main International Patent Class: H04L-027/26
International Patent Class: **H04L-001/02** ; H04B-014/00; **H04L-001/06**
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 7425

English Abstract
  A system and method is provided for adaptive orthogonal frequency
  division multiplexed (OFDM) transmission (ADOT). The system and method
  includes OFDM processing of information symbols and is configured for
  transmission and reception of OFDM signals on orthogonally polarized
  antennas. Further, the system and method of the present invention is
  adaptable to channel conditions. An ADOT transmit system includes a
  transmit processor configured for a specific OFDM modulation of incoming
  data symbols to be transmitted based on channel condition data, and a
  pair or orthogonally polarized transmission antennas. An ADOT receive
  system includes a receive processor configured for restoring the
  transmitted OFDM signals according to a transmission mode employed in the
  transmit system. Continual measurement of the transmission channel yields
  channel condition data for use in selecting a particular transmission
  mode.

French Abstract
  L'invention porte sur un systeme et un procede de transmission adaptative
  en polarisation double (ADOT) de signaux par multiplexage frequentiel
  orthogonal (OFDM), qui consiste a traiter par OFDM les symboles
  d'information, et concu pour emettre et recevoir les signaux OFDM a
  l'aide d'antennes a polarisation orthogonale et pour s'adapter a l'etat
  des canaux. Le systeme d'emission ADOT utilise un processeur specifique
  modulant en OFDM les symboles de donnees entrantes a emettre, en fonction
  de donnees sur l'etat des canaux, ainsi qu'une paire d'antennes
  emettrices a polarisation orthogonale. Le systeme de reception ADOT
  utilise un processeur restaurant les signaux OFDM emis en utilisant le
  mode de transmission du systeme d'emission. Une mesure en continu des

canaux de transmission fournit des donnees sur leur etat permettant de
selectionner un mode particulier de transmission.

Legal Status (Type, Date, Text)
Publication   20020124 A2 Without international search report and to be
                         republished upon receipt of that report.
Examination   20020404 Request for preliminary examination prior to end of
                       19th month from priority date
Search Rpt   20020613 Late publication of international search report
Republication 20020613 A3 With international search report.
Republication 20020613 A3 Before the expiration of the time limit for
                         amending the claims and to be republished in the
                         event of the receipt of amendments.

International Patent Class: **H04L-001/02** ...

... **H04L-001/06**
Fulltext Availability:
  Claims

Claim
... for selecting one of a plurality of transmission
  30 modes of the transmitted RF signals **based** on the   **channel**
   conditions , and a memory for storing a plurality of
  addressable receive **signal** matrices, the **adaptive** receive
  processor configured to map the first and second frequency
  domain signals to one of...

 46/5,K/32   (Item 32 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00846686   **Image available**
DESIRED VOICE DETECTION IN ECHO SUPPRESSION
DETECTION VOCALE VOULUE DANS LA SUPPRESSION D'ECHO
Patent Applicant/Assignee:
  ERICSSON INC, 7001 Development Drive, Research Triangle Park, NC 27709,
    US, US (Residence), US (Nationality), (For all designated states
    except: US)
Patent Applicant/Inventor:
  ROMESBURG Eric Douglas, 69B Half Dollar Road, Chapel Hill, NC 27516, US,
    US (Residence), US (Nationality), (Designated only for: US)
Legal Representative:
  OWEN John R (et al) (agent), Coats & Bennett, PLLC, P.O. Box 5, Raleigh,
    NC 27602, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200180439 A1 20011025 (WO 0180439)
  Application: WO 2001US7310 20010305 (PCT/WO US0107310)
  Priority Application: US 2000549964 20000414
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ
  EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS
  LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ
  TM TR TT TZ UA UG US UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: H04B-003/23
International Patent Class: H04B-003/20; H04M-009/08
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 10010

English Abstract
  A hybrid echo suppresser and associated methods of use provide echo
  suppression in a bi-directional communications system, while minimizing
  desired-voice signal disruption. The hybrid echo suppresser includes a
  linear echo canceller (LEC), a non-linear processor (NLP), and a control
  circuit. The LEC operates on an echo-causing signal to produce an
  estimated-echo signal, which is subtracted from an input echo-containing
  signal, thereby producing an echo-cancelled signal. The NLP operates on
  this echo-cancelled signal to eliminate residual echo arising from system
  non-linearities. The control circuit repeatedly compares the
  echo-containing signal and the estimated-echo signal to determine if the
  echo-containing signal includes a desired-voice component. If not, the
  control circuit operates the NLP in an echo-voice mode having substantial
  signal attenuation. Upon detecting the start or continuation of the
  desired-voice component, the control circuit switches the NLP such that
  is has less attenuation and avoids clipping or suppressing the desired
  voice.

French Abstract
  Un suppresseur d'echo hybride et ses procedes d'utilisation permettent
  d'annuler l'echo dans un systeme de communications bidirectionnel et de
  minimiser simultanement l'interruption du signal vocal voulu. Le
  suppresseur d'echo hybride comprend un annuleur d'echo (LEC), un
  processeur non lineaire (NLP) et un circuit de commande. Le LEC agit sur
  un signal induisant un echo, pour produire un signal d'echo estime qui
  est soustrait d'un signal contenant un echo d'entree, et produire ainsi
  un signal a echo annule. Le NLP agit sur ledit signal a echo annule pour
  eliminer l'echo residuel provenant de non linearites de systeme. Le
  circuit de commande compare a repetition le signal contenant l'echo et le
  signal a echo estime pour determiner si le signal contenant l'echo
  comprend une composante vocale voulue. Si ce n'est pas le cas, le circuit
  de commande utilise le NLP en mode vocal a echo a attenuation sensible du
  signal. Lors de la detection du debut ou de la suite de la composante
  vocale voulue, le circuit de commande commute le NLP, de maniere que
  l'attenuation soit reduite et empeche l'ecretage ou la suppression du
  signal vocal voulu.

Legal Status (Type, Date, Text)
Publication   20011025 A1 With international search report.
Publication   20011025 A1 Before the expiration of the time limit for
                          amending the claims and to be republished in the
                          event of the receipt of amendments.
Examination   20020110 Request for preliminary examination prior to end of
                          19th month from priority date

Fulltext Availability:
  Detailed Description

Detailed Description
...   canceled signal e relating to residual echo.
  Such adaptive feedback allows the LEC 144 to **continually** adjust its

output
estimated-echo **signal** y, however such **adjustments** lag when echo **path**

conditions are **changing** rapidly. Advanced methods for dynarnically
measuring
the echo cancellation provided by

46/5,K/33 **(Item 33 from file: 349)**
DIALOG(R)File 349:PCT FULLTEXT

00566341 **Image available**
METHOD AND APPARATUS FOR USE WITH SUBMERSIBLE ELECTRICAL EQUIPMENT
PROCEDE ET APPAREIL A UTILISER AVEC UN EQUIPEMENT ELECTRIQUE SUBMERSIBLE
Patent Applicant/Assignee:
  SCHLUMBERGER TECHNOLOGY CORPORATION,
Inventor(s):
  VENERUSO Anthony F,
  ROBERTSON Gerald W,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200029714 A1 20000525 (WO 0029714)
  Application: WO 99US26627 19991112 (PCT/WO US9926627)
  Priority Application: US 98193962 19981118
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK EE ES FI GB GD
  GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG
  MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN
  YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT
  BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA
  GN GW ML MR NE SN TD TG
Main International Patent Class: E21B-034/06
International Patent Class: F16K-031/04
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 5789

English Abstract
  A system for use in a subterranean well includes a production tubing
  (52) and a valve. The production tubing has a port to establish
  communication between a passageway of the tubing and well fluid from a
  formation. The valve is mounted to the production tubing and includes a
  sealed housing (45), a motor (40), a valve cover (36), an actuator drive
  (32) and a sensor (60). The motor is located inside the housing, and the
  actuator drive is actuated by the motor to move the valve cover (36) over
  the port to selectively control the communication of the well fluid
  between the formation and the passageway of the tubing. The sensor is
  located inside the housing and adapted to indicate the presence of the
  fluid inside the housing.

French Abstract
  L'invention concerne un systeme a utiliser dans un puits souterrain,
  comprenant un tubage de production (52) et une soupape. Le tubage de
  production dispose d'un orifice permettant d'etablir une communication
  entre un passage du tubage et le fluide du puits a partir d'une
  formation. La soupape, montee sur le tubage de production, comprend un
  boitier etanche (45), un moteur (40), un couvercle (36) de soupape, un

actionneur (32) et un capteur (60). Le moteur est loge dans le boitier et
l'actionneur est actionne par le moteur afin de deplacer le couvercle
(36) de la soupape au-dessus de l'orifice de facon a commander
selectivement la communication du fluide du puits entre la formation et
le passage du tubage. Le capteur, loge dans le boitier, est concu pour
indiquer la presence du fluide a l'interieur dudit boitier.

Fulltext Availability:
  Claims

Claim
... one
  resistor comprises:
  a wire.

  9 The apparatus of claim 1, further comprising:
  a communication **link** ,
  wherein the **status circuit** comprises:
  a telemetry interface **adapted** to generate **signals** on the
  communication link indicative of the indication from the sensor.
  I 10. The apparatus...

 46/5,K/34   (Item 34 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00307942   **Image available**
PCS POCKET PHONE/MICROCELL COMMUNICATION OVER-AIR PROTOCOL
PROTOCOLE HERTZIEN DE COMMUNICATIONS PAR TELEPHONE DE POCHE OU A SYSTEME
    MICRO-CELLULAIRE
Patent Applicant/Assignee:
  OMNIPOINT CORPORATION,
Inventor(s):
  ANDERSON Gary B,
  JENSEN Ryan N,
  PETCH Bryan K,
  PETERSON Peter O,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9526094 A1 19950928
  Application: WO 95US3500 19950320   (PCT/WO US9503500)
  Priority Application: US 94215306 19940321; US 94284053 19940801
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  CA JP KR AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: H04M-011/00
International Patent Class: H04Q-07:20
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 85526

English Abstract
  A simple and flexible over-air protocol for use with a mobile telephone
  system, having hand-held telephones (102) in a microcell or other type of
  cellular communication system. A method in which user stations (102)
  communicate with one or more base stations (104) to place and receive
  telephone calls, in which the user stations (102) are provided a secure
  voice or data link and have the ability to handoff calls between base

stations (104) while such calls are in progress. Each base station (104) has a set of "air channels" to which it transmits in sequence. The air channels supported by each base station (104) are called that base station's polling loop. A user station (102) receives general polling information on an unoccupied air channel, transmists responsive information to the base station, and awaits acknowledgement from the base station. Each base station (104) may therefore simultaneously maintain communication with as many user stations (102) as there are air channels in its polling loop. The ability of a user station (102) to communicate on any unoccupied air channel makes the protocol air-channel agile, while the stability of user station and base station clocks may define air channels, gaps, and minor frames.

French Abstract
   Un protocole hertzien simple et souple s'utilise avec un systeme de telephonie mobile disposant de telephones tenus a la main (102) relevant d'une micro-cellule ou d'un autre type de systeme de communications cellulaire. Un procede permet de communiquer depuis des stations d'utilisateur (102), avec une ou plusieurs stations de base (104) pour lancer et recevoir des appels telephoniques, et il confere a ces stations d'utilisateur (102) une liaison vocale ou de donnees sure et la possibilite de transferer des appels en cours entre des stations de base (104). Chaque station de base (104) dispose d'un jeu de canaux hertziens sur lesquels elle emet de maniere sequentielle. Ces canaux constituent la boucle d'appels selectifs d'une telle station de base. Une station (102) d'utilisateur recoit des informations generales d'appels selectifs sur un canal inoccupe, emet des informations en reponse vers la station de base et en attend l'accuse de reception. Chaque station de base (104) peut donc simultanement rester en communication avec autant de stations d'utilisateur (102) qu'il existe de canaux hertziens dans sa boucle d'appels selectifs. La possibilite de communiquer depuis une station d'utilisateur (102) sur tout canal hertzien inoccupe rend ce protocole agile en canaux hertziens alors que la stabilite des horloges des stations d'utilisation et de base permet·de definir des canaux hertziens, des creneaux libres et des blocs de donnees limites.

Fulltext Availability:
  Detailed Description

Detailed Description
... Quality iMeasurement (CQ1M) A digital message in two parts in which the results of mobile **channel quality** measurements are sent to a **Base** Station over the FACCH or the SACCH.

   Charging Indicator Chipping - A wideband modulating **signal** 's amplitude that **changes continually** between two states, high and low, arbitrarily called +I and - 1, respectively. The sequence of...

 46/5,K/35   (Item 35 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00192134
ERROR RATE MONITOR
MONITEUR DE TAUX D'ERREURS
Patent Applicant/Assignee:
  THE COMMONWEALTH OF AUSTRALIA,
  SCHOLZ Jason Beaufort,
Inventor(s):

SCHOLZ Jason Beaufort,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9109482 A1 19910627
  Application: WO 90AU581 19901206 (PCT/WO AU9000581)
  Priority Application: AU 897774 19891207
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AT AU BB BE BF BG BJ BR CA CF CG CH CH CM DE DK ES FI FR GA GB GR HU IT
  JP KP KR LK LU MC MG ML MR MW NL NO RO SD SE SN SU TD TG US
Main International Patent Class: **H04L-001/20**
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 13337

English Abstract
   A method of assessing a link for a digital communication system and
   providing a value for a channel or link state parameter, particularly bit
   error rate, and apparatus for the same, in which an estimate of the
   probability density function for the channel or link is obtained by
   categorising decision variables into threshold categories, and comparing
   the estimated probability density function with stored known probability
   density functions. With each stored probability density function the
   value of the channel parameter being monitored is stored. The value of
   the channel parameter being monitored is determined by selecting the
   value associated with the stored probability density function closest
   resembling the estimated probability density.

French Abstract
   Methode permettant d'evaluer une liaison pour un systeme de
   communication digital et de fournir une valeur pour un parametre de canal
   ou d'etat de liaison, en particulier le taux d'erreurs binaires, et
   appareil pour celui-ci, dans lequel une estimation de la fonction de
   densite de probabilite pour le canal ou la liaison est obtenue par
   categorisation des variables de decision en des categories de seuil, et
   comparaison de la fonction de densite de probabilite a des fonctions de
   densite de probabilite connues stockees. Avec chaque fonction de densite
   de probabilite stockee la valeur du parametre de canal controle est
   stockee. On determine la valeur du parametre de canal controle en
   selectionnant la valeur associee avec la fonction de densite de
   probabilite ressemblant le plus a la densite de probabilite estimee.

Main International Patent Class: **H04L-001/20**
Fulltext Availability:
  Claims

Claim
... function
  associated with the decision variables
  calculating means adapted to provide for at least one **channel** or **link**
   state parameter a parameter value **dependant** upon the measured
  probability density function.
  0

  46 An apparatus for use in a digital communication system including:
  receiving means adapted to receive a first **signal** ;
   signal conditioning means **adapted** to convert the first signal into at
  least one output signal representative of a decision...

46/5,K/36   (Item 36 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00173181
ADAPTIVE RATE CONTROL FOR ECHO CANCELLING MODEM
COMMANDE ADAPTATIVE DE VITESSE POUR MODEM D'ANNULATION D'ECHO
Patent Applicant/Assignee:
  CODEX CORPORATION,
Inventor(s):
  SRIDHAR Manickam R,
  PAYTON John L,
  BARGOOT Carol Ann,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9006637 A1 19900614
  Application: WO 89US5450 19891204   (PCT/WO US8905450)
  Priority Application: US 88370 19881202
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AT AU BE CH DE ES FR GB IT JP LU NL SE
Main International Patent Class: H04B-003/23
International Patent Class: H04B-15:00; H04L-27:04; H04L-27:20
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 13652

English Abstract
  Channel distortion and echo signals detrimentally affect data
  communication over a channel. The invention provides an echo cancellation
  modem for full-duplex communication which selects a modulation scheme
  prior to data communication, and requests changes to the level of
  modulation during data communication when channel quality has changed
  significantly. The modem includes an echo canceller (12, 14), a monitor
  (24) for determining the quality of the channel based on analysis of a
  residual echo component, and a controller (46) for selecting an
  acceptable modulation scheme based on the analysis by the monitor. The
  modem requests the remote device to operate at a selected rate, and
  operates at the selected rate only if the the remote device concurs. The
  modem uses a fall forward flag (68) to prevent contention between the
  modem and the remote device when the remote device cannot support a
  requested higher level modulation scheme. The modem includes
  re-initialization logic which selects appropriate monitor thresholds for
  coded and uncoded modulation options.
French Abstract
  La distorsion des canaux et les signaux a echo affectent les
  communications de donnees sur un canal. L'invention concerne un modem
  d'annulation d'echo pour des communications en duplex integral
  selectionnant un plan de modulation avant la communication de donnees, et
  demande des modifications au niveau de la modulation pendant la
  communication de donnees lorsque la qualite du canal s'est modifiee de
  maniere significative. Ledit modem comprend une unite d'annulation d'echo
  (12, 14), un moniteur (24) determinant la qualite du canal basee sur
  l'analyse d'une composante d'echo residuel, ainsi qu'une unite de
  commande (46) selectionnant un plan de modulation acceptable base sur
  l'analyse faite par ledit moniteur. Le modem demande au dispositif
  eloigne de fonctionner a une vitesse selectionnee, et ne fonctionne a la
  vitesse selectionnee que si ledit dispositif eloigne est d'accord. Ledit

modem utilise un indicateur (68) avant de chute afin d'empecher une
inadequation entre le modem et le dispositif eloigne, lorsque ce dernier
ne peut s'adapter a un plan de modulation demande de niveau superieur. Le
modem comprend une logique de reinitialisation selectionnant les seuils
appropries du moniteur pour des options de modulation codee et non codee.

Fulltext Availability:
  Claims

Claim
... quality, said modulation
  7 schemes including coded and uncoded modulation modes,
  8 comprising
  monitoring the **quality** of the **channel** **based** on received
  10 data **signals** ,
  determining when a **change** to a higher level modulation
  12 scheme would be permissible **based** on when the monitored
  13 **channel** **quality** exceeds a threshold, and
  setting the threshold to one value with respect to a
  15...and a different value
  corresponding to a change to an uncoded modulation mode,
  monitoring the **quality** of the **channel** **based** on
  received data **signals** ,
  determining when a **change** to a higher level
  modulation scheme would be permissible **based** on when the
  monitored **channel** **quality** exceeds the threshold,
  is requesting the remote device to change to a higher
  level modulation...

File 696:DIALOG Telecom. Newsletters 1995-2004/Jul 23
        (c) 2004 The Dialog Corp.
File 15:ABI/Inform(R) 1971-2004/Aug 02
        (c) 2004 ProQuest Info&Learning
File 98:General Sci Abs/Full-Text 1984-2004/Jun
        (c) 2004 The HW Wilson Co.
File 484:Periodical Abs Plustext 1986-2004/Jul W3
        (c) 2004 ProQuest
File 813:PR Newswire 1987-1999/Apr 30
        (c) 1999 PR Newswire Association Inc
File 613:PR Newswire 1999-2004/Aug 01
        (c) 2004 PR Newswire Association Inc
File 635:Business Dateline(R) 1985-2004/Jul 31
        (c) 2004 ProQuest Info&Learning
File 810:Business Wire 1986-1999/Feb 28
        (c) 1999 Business Wire
File 610:Business Wire 1999-2004/Aug 01
        (c) 2004 Business Wire.
File 369:New Scientist 1994-2004/Jul W3
        (c) 2004 Reed Business Information Ltd.
File 370:Science 1996-1999/Jul W3
        (c) 1999 AAAS
File 20:Dialog Global Reporter 1997-2004/Aug 02
        (c) 2004 The Dialog Corp.
File 624:McGraw-Hill Publications 1985-2004/Jul 30
        (c) 2004 McGraw-Hill Co. Inc
File 634:San Jose Mercury Jun 1985-2004/Jul 31
        (c) 2004 San Jose Mercury News
File 647:CMP Computer Fulltext 1988-2004/Jul W4
        (c) 2004 CMP Media, LLC
File 674:Computer News Fulltext 1989-2004/Jul W1
        (c) 2004 IDG Communications

Set   Items   Description
S1   779546   SIGNAL? ?
S2   16523   S1(3N)(MODIFY? OR MODIFIE? ? OR MODIFICATION? OR CHANG??? ?
                  OR VARY??? ? OR VARIE? ? OR ADJUST?)
S3   1968   S1(3N)(READJUST? OR ADAPT??? ? OR ADAPTAB? OR ALTER OR ALT-
                 ERS OR ALTERED OR ALTERING OR ALTERATION?)
S4   1931   S1(3N)(EDIT??? ? OR REVIS???? ? OR REDEFIN? OR REPROGRAM? -
                  OR RECONFIGUR? OR ALTERR?)
S5   20   S1(3N)RE()(CONFIGUR? OR PROGRAM??? ? OR PROGRAMM? OR DEFIN-
                  E? ? OR DEFINI?)
S6   2732   S1(3N)(RESYNTHESI? OR REPRODUC? OR REGENERAT? OR RECREAT? -
                 OR REFORM? OR RECONSTRUCT?)
S7   13   S1(3N)RE()(SYNTHESIS? OR SYNTHESIZ? OR PRODUC????? ? OR FO-
                 RM???? ? OR FORMATION?)
S8   22   S1(3N)RE()(GENERAT???? ? OR CREAT???? ? OR CONSTRUCT?)
S9   8213039   CHANNEL? ? OR LINE OR LINES OR CIRCUIT??? ? OR PATH? ? OR -
                 PATHWAY? ?
S10   102094   S9(2N)(QUALITY OR STATE OR STATES OR CONDITION? ? OR STATU-
                 S? OR MODE OR MODES)
S11   14564984   STRINGEN? OR STANDARD? ? OR THRESHOLD? ? OR CONDITION? ? OR
                  VALUE OR VALUES OR LEVEL? ? OR PROFILE? ? OR PATTERN? ?
S12   8234196   BOUND? ? OR RANGE OR RANGES OR CRITERIA? OR CRITERION? OR -
                 NORM? ? OR MODEL? ? OR RULE OR RULES OR FORMULA?
S13   2739707   BASELINE? OR BASE()LINE? ? OR TEMPLATE? OR YARDSTICK? OR Y-
                 ARD()STICK? ? OR BENCHMARK? OR BENCH()MARK??? ? OR TARGET? ?
S14   747132   S11:S13(3N)(MODIFY? OR MODIFIE? ? OR MODIFICATION? OR CHAN-
                 G??? ? OR VARY??? ? OR VARIE? ? OR ADJUST?)
S15   70752   S11:S13(3N)(READJUST? OR ADAPT??? ? OR ADAPTAB? OR ALTER OR

```
                    ALTERS OR ALTERED OR ALTERING OR ALTERATION?)
S16    115774    S11:S13(3N)(EDIT??? ? OR REVIS???? ? OR REDEFIN? OR REPROG-
                    RAM? OR RECONFIGUR? OR  ALTERR?)
S17       625    S11:S13(3N)RE()(CONFIGUR? OR PROGRAM??? ? OR PROGRAMM? OR -
                    DEFINE? ? OR DEFINI?)
S18      1080    S10(5N)(DEPEND? OR CORRELAT? OR LINK? OR INTERLINK? OR INT-
                    ERELAT? OR INTERRELAT?)
S19       613    S10(5N)(RELAT?? ? OR RELATING OR RELATION? OR CORELAT? OR -
                    CONTINGEN? OR PREDICAT? OR CIRCUMSCRIB?)
S20      1633    S10(5N)(BASE OR BASED OR BASING OR SUBJECT?)
S21      1305    S2:S8(S)S14:S17
S22        22    S21(S)S10
S23         4    S2:S8(S)S18:S20
S24        24    S22:S23
S25         7    S24/2001:2004
S26        17    S24 NOT S25
S27        13    RD (unique items)
```

27/3,K/1   (Item 1 from file: 696)
DIALOG(R)File 696:DIALOG Telecom. Newsletters
(c) 2004 The Dialog Corp. All rts. reserv.

00003342
The Bare Necessities

Satellite Trader
October 1,1995   DOCUMENT TYPE: NEWSLETTER
PUBLISHER: CABLE SATELLITE AND TV NEWS
LANGUAGE: ENGLISH   WORD COUNT: 575   RECORD TYPE: FULLTEXT

TEXT:
...enough in reserve to cope with poor **signal   conditions . Channel
change**

27/3,K/2   (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2004 ProQuest Info&Learning. All rts. reserv.

01603774 02-54763
New telecommunications technologies
Cohen, Robert
Business Economics v33n2 PP: 20-24 Apr 1998
ISSN: 0007-666X JRNL CODE: BEC
WORD COUNT: 3616

...TEXT: act as "filters" that can remove interference in a dynamic way or
can compensate for **alterations** in the **signal** . A number of factors can
 alter the signal character, including various **changes** in the **condition**
 of the **circuit** . Echo problems are an important problem that HDSL is able
to address. Echoes are troublesome...

27/3,K/3   (Item 2 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2004 ProQuest Info&Learning. All rts. reserv.

00880310 95-29702
Cellular protocol wars escalate
Wexler, Joanie

Network World v11n26 PP: 32 Jun 27, 1994
ISSN: 0887-7661 JRNL CODE: NWW
WORD COUNT: 504

...TEXT: such as ETC and MNP-10 compensate for poor signal-to-noise ratio
in cellular **links** by adjusting speeds to fit **line conditions** ,
reducing data packet size when many errors occur and **adjusting signals**
when passing cellular communications to land-lines.

FURTHER PROGRESS

Meanwhile, net access vendor Primary Access...

 27/3,K/4   (Item 3 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

00409431 88-26264
Critical Modem Components
Humphrey, Jack
Business Communications Review v18n3 PP: 84-86 May/Jun 1988
ISSN: 0162-3885 JRNL CODE: BCR

...ABSTRACT: the demodulator. The equalizer circuit should be tested at
different signal levels over differing steady **state   channel**
 impairments.   In addition, the AGC removes the effects of **varying**
 received **signal   levels** . Laboratory tests of echo cancelers, which rid
the receiver of the transmitter's reflected signal...

 27/3,K/6   (Item 1 from file: 635)
DIALOG(R)File 635:Business Dateline(R)

0569494 95-25227
PADS predicts a new era in PC board industry
Anonymous
MASS HIGH TECH (Watertown, MA, US), V13 N4 s1 p14
PUBL DATE: 950206
WORD COUNT: 973
DATELINE: Marlborough, MA, US

TEXT:

     ...pattern. This shape-based semiautomatic editor reduces manual
routing time and optimizes board design.

     * Conditional **rules** --automatically **changes** a **signal** 's clearance
requirements relative to adjacent signals during manual and dynamic
routing. This allows designers to improve electrical **circuit   quality**
and optimize board real estate.

     * Design rules hierarchy--this allows clearance, routing, and
high-speed...

 27/3,K/7   (Item 2 from file: 635)
DIALOG(R)File 635:Business Dateline(R)

TEXT:

...s job that much easier," Hosilyk continued.

Product features include:

-- 9600 bps data/facsimile rate

-- **Signal   level** switch to **adjust** to different phone and **line**

 conditions
-- End cups adapt to fit handset, reducing noise and error

-- Velcro strap for a secure...

?

```
Set      Items    Description
S1      978774    SIGNAL? ?
S2       20062    S1(3N)(MODIFY? OR MODIFIE? ? OR MODIFICATION? OR CHANG??? ?
                  OR VARY??? ? OR VARIE? ? OR ADJUST?)
S3        3525    S1(3N)(READJUST? OR ADAPT??? ? OR ADAPTAB? OR ALTER OR ALT-
                  ERS OR ALTERED OR ALTERING OR ALTERATION?)
S4        3138    S1(3N)(EDIT??? ? OR REVIS???? ? OR REDEFIN? OR REPROGRAM? -
                  OR RECONFIGUR? OR  ALTERR?)
S5          35    S1(3N)RE()(CONFIGUR? OR PROGRAM??? ? OR PROGRAMM? OR DEFIN-
                  E? ? OR DEFINI?)
S6        4122    S1(3N)(RESYNTHESI? OR REPRODUC? OR REGENERAT? OR RECREAT? -
                  OR REFORM? OR RECONSTRUCT?)
S7          10    S1(3N)RE()(SYNTHESIS? OR SYNTHESIZ? OR PRODUC????? ? OR FO-
                  RM???? ? OR FORMATION?)
S8          58    S1(3N)RE()(GENERAT???? ? OR CREAT???? ? OR CONSTRUCT?)
S9      9715694   CHANNEL? ? OR LINE OR LINES OR CIRCUIT??? ? OR PATH? ? OR -
                  PATHWAY? ?
S10      143375   S9(2N)(QUALITY OR STATE OR STATES OR CONDITION? ? OR STATU-
                  S? OR MODE OR MODES)
S11    13887105   STRINGEN? OR STANDARD? ? OR THRESHOLD? ? OR CONDITION? ? OR
                  VALUE OR VALUES OR LEVEL? ? OR PROFILE? ? OR PATTERN? ?
S12     8369000   BOUND? ? OR RANGE OR RANGES OR CRITERIA? OR CRITERION? OR -
                  NORM? ? OR MODEL? ? OR RULE OR RULES OR FORMULA?
S13     2511858   BASELINE? OR BASE()LINE? ? OR TEMPLATE? OR YARDSTICK? OR Y-
                  ARD()STICK? ? OR BENCHMARK? OR BENCH()MARK??? ? OR TARGET? ?
S14     1316561   S11:S13(3N)(MODIFY? OR MODIFIE? ? OR MODIFICATION? OR CHAN-
                  G??? ? OR VARY??? ? OR VARIE? ? OR ADJUST?)
S15       77802   S11:S13(3N)(READJUST? OR ADAPT??? ? OR ADAPTAB? OR ALTER OR
                  ALTERS OR ALTERED OR ALTERING OR ALTERATION?)
S16      134541   S11:S13(3N)(EDIT??? ? OR REVIS???? ? OR REDEFIN? OR REPROG-
                  RAM? OR RECONFIGUR? OR  ALTERR?)
S17         723   S11:S13(3N)RE()(CONFIGUR? OR PROGRAM??? ? OR PROGRAMM? OR -
                  DEFINE? ? OR DEFINI?)
S18        1977   S10(5N)(DEPEND? OR CORRELAT? OR LINK? OR INTERLINK? OR INT-
                  ERELAT? OR INTERRELAT?)
S19           0   S10(3N)(CO OR INTER)()(RELAT?? ? OR RELATING OR RELATION?)
S20         428   S10(3N)(RELAT?? ? OR RELATING OR RELATION? OR CORELAT? OR -
                  CONTINGEN? OR PREDICAT? OR CIRCUMSCRIB?)
S21        1518   S10(3N)(BASE OR BASED OR BASING OR SUBJECT?)
S22        2127   S2:S8(S)S14:S17
```

```
S23      5    S2:S8(S)S18:S21
S24     42    S22(S)S10
S25     42    S23:S24
S26      8    S25/2001:2004
S27     34    S25 NOT S26
S28     23    RD (unique items)
```

28/3,K/10   (Item 5 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB

06806879   SUPPLIER NUMBER: 15119634   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Feature-rich chip set powers data-fax modem. (Silicon Systems Inc.'s
  73D2950T chip set) (Product Announcement)
Leonard, Milt
Electronic Design, v41, n25, p55(3)
Dec 2, 1993
DOCUMENT TYPE: Product Announcement   ISSN: 0013-4872   LANGUAGE:
  ENGLISH   RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1492   LINE COUNT: 00118

...   demodulator, which also recovers the data clock from the incoming
signal. Adaptive equalization compensates for **varying   line   conditions**
by automatically **changing** filter parameters.
    DSP MODULATION
    In the differential phase-shift-keying (DPSK) mode, the DSP chip...

28/3,K/15   (Item 1 from file: 160)
DIALOG(R)File 160:Gale Group PROMT(R)

01865005
Mitel, BTD modem unveiled
Network World   February 8, 1988   p. 13,17

... 9.6,   and   14.4 Kbps transmission, in accordance with the speeds of
incoming   modem   **signals** . Also,   to   accommodate   **changing   line
conditions** , the   new   modem offers automatic fall-forward and fallback
capabilities. The DM 4142TCX consists of...

28/3,K/16   (Item 2 from file: 160)
DIALOG(R)File 160:Gale Group PROMT(R)

01337438
Prentice Unveils 2,400-BPS Modem.
INFOWORLD   April 21, 1986   p. 62

...dial, auto-answer modem works with Touch Tone and pulse dial phones,
and it automatically **adjusts** its signals in response to **varying** phone
line   conditions . The   modem   meets   CCITT   V.22   bis communications
specifications, as well as Bell 212A and...

28/3,K/18   (Item 4 from file: 160)
DIALOG(R)File 160:Gale Group PROMT(R)

00513895
Plessey's (UK) 16,000 bps modem for use over voice-grade 4-wire leased telephone lines is claimed to be the fastest on the market.
Computer Weekly   October 18, 1979   p. 15

...into 2 sets of 1-of-8 amplitude levels on two 2,700-Hz carrier **signals** . Automatic **adaptive** equalization equipment using bit-sliced microprocessors counters noise and **varying line conditions** .

28/3,K/21   (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2004 The Gale Group. All rts. reserv.

01719590   SUPPLIER NUMBER: 16298395   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Hit the road. (mobile computing with Microsoft Windows) (Mobile Computing) (Cover Story)
Seltzer, Larry; Smith, Gregory; Venditto, Gus; Frezza, Bill; Butner, Richard
Windows Sources, v3, n1, p54(2)
Jan, 1995
DOCUMENT TYPE: Cover Story   ISSN: 1065-9641   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 658   LINE COUNT: 00050

...ABSTRACT: cellular modems incorporate such error-correction protocols as MNP 10 to compensate for the adverse **line conditions** found on cellular networks; most also have circuitry that let them operate as land-line modems. The new V.34 standard is not only faster than previous **standards** but intelligently **adjusts** parameters according to **signal** quality with its new 'line probing' protocol. Windows 95 will be very important to mobile...
...   example, it also uses a new protocol, line probing. As soon as a modem detects **conditions** on the **line changing** (if the **signal** weakens, for instance), it invokes line probing, which reacts to the new **line conditions** by immediately **adjusting** such parameters as compression and error correction.
PCMCIA cellular modems use protocols such as Microcom...

28/3,K/22   (Item 2 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2004 The Gale Group. All rts. reserv.

01293865   SUPPLIER NUMBER: 07179622   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Modems, muxes remain staples of industry. (Technology Overview) (communications industry) (includes related article about MNP layered protocol)
Axner, David H.
TPT, v7, n2, p52(6)
Feb, 1989
ISSN: 1043-9099   LANGUAGE: ENGLISH   RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 2459   LINE COUNT: 00202

...   does not interfere with the received signal from the far-end modem. Echo cancellation actually **adapts** to **changing line conditions** by using the difference **signal** to **alter** the echo nullifying process. This is referred to as adaptive cancellation.
The V.32 international...

28/3,K/23   **(Item 3 from file: 275)**
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2004 The Gale Group. All rts. reserv.

01126554   SUPPLIER NUMBER: 00641156
Speedy Dial-Up Modem Adjusts to Line Conditions.
Data Communications, v14, n10, p298
Sept., 1985
DOCUMENT TYPE: product announcement   ISSN: 0363-6399   LANGUAGE:
  ENGLISH   RECORD TYPE: ABSTRACT

...ABSTRACT: up modem that operates at high speeds and uses new technology
enabling the modem to **adjust** to **line** **conditions** and receiving
equipment. The modem produces tones to match telephone frequency bandwidth,
and for each tone, checks and **adjusts** for distortion, **signal**
impairments, noises, and amplitude variation. The modem is available in a
plug-in board for...

```
File 347:JAPIO Nov 1976-2004/Mar(Updated 040708)
        (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200448
        (c) 2004   Thomson Derwent
File 348:EUROPEAN PATENTS 1978-2004/Jul W03
        (c) 2004 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20040729,UT=20040722
        (c) 2004 WIPO/Univentio

Set     Items   Description
S1        91    AU='VAINIO J':AU='VAINIO JANNE'
S2        54    AU='MIKKOLA H':AU='MIKKOLA HANNU J'
S3        44    AU='ROTOLA P J':AU='ROTOLA-PUKKILA JANI'
S4        25    TYPICALITY
S5         2    S1:S3 AND S4
S6       232    ITERATIV?(3N)SYNTHESI?
S7         3    S1:S3 AND S6
S8         3    S5 OR S7
?
```

8/9/1   (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

014447796   **Image available**
WPI Acc No: 2002-268499/200231
XRPX Acc No: N02-208956
  **Audible error detector and controller utilizing channel quality data and
  iterative synthesis , errors occurring in synthesized speech are
  detected by searching for typical sound with stringency dependent upon
  channel quality**
Patent Assignee: NOKIA CORP (OYNO); NOKIA INC (OYNO); MIKKOLA H J
  (MIKK-I); ROTOLA-PUKKILA J (ROTO-I); VAINIO J (VAIN-I); NOKIA MOBILE
  PHONES LTD (OYNO)
Inventor: **MIKKOLA H J ; ROTOLA-PUKKILA J ; VAINIO J**
Number of Countries: 095 Number of Patents: 005
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
WO 200195313   A1   20011213 WO 2001IB965   A   20010604 200231   B
AU 200162571   A   20011217 AU 200162571   A   20010604 200231
US 20020002456 A1   20020103 US 2000209860   P   20000607 200231
                              US 2001852127   A   20010509
EP 1292943   A1   20030319 EP 2001936704   A   20010604 200322
                              WO 2001IB965   A   20010604
CN 1433562   A   20030730 CN 2001810686   A   20010604 200365

Priority Applications (No Type Date): US 2000209860 P 20000607; US
  2001852127 A 20010509
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
WO 200195313 A1 E 23 G10L-019/00
  Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
  CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP
  KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT
  RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
  Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
  IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
AU 200162571 A   G10L-019/00   Based on patent WO 200195313
US 20020002456 A1   G10L-013/00   Provisional application US 2000209860

EP 1292943   A1 E   G10L-019/00   Based on patent WO 200195313
  Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
  LI LT LU LV MC MK NL PT RO SE SI TR
CN 1433562   A   G10L-019/00

Abstract (Basic): WO 200195313 A1
    NOVELTY - Errors occurring in synthesized speech are detected by
  searching for atypical sound with a stringency dependent upon channel
  quality. The greater the channel quality deficiency is, the higher the
  typically standards will be. Errors are controlled by either
  re-synthesizing the signal in an iterative way using typically
  standards which vary with channel quality deficiency, or by modifying
  the output signal using **typicality** standards which vary with channel
  quality deficiency, or both.
    DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a
  method
    USE - For audible communication. For speech coding and channel
  coding
    ADVANTAGE - Improves detection and concealment of audio errors

occurring as result of imperfect transmission channel quality
DESCRIPTION OF DRAWING(S) - The figure shows a diagrammatic
representation of the iterative processor.
pp; 23 DwgNo 3/3
Title Terms: AUDIBLE; ERROR; DETECT; CONTROL; UTILISE; CHANNEL; QUALITY;
DATA; ITERATIVE; SYNTHESIS; ERROR; OCCUR; SYNTHESIS; SPEECH; DETECT;
SEARCH; TYPICAL; SOUND; DEPEND; CHANNEL; QUALITY
Derwent Class: P86; U21; W01; W04
International Patent Class (Main): G10L-013/00; G10L-019/00
International Patent Class (Additional): H03M-013/45; H04L-001/00;
H04L-001/20
File Segment: EPI; EngPI
Manual Codes (EPI/S-X): U21-A06; W01-A01; W01-A01C; W04-V05G

 8/5/2   (Item 1 from file: 348)
DIALOG(R)File 348:EUROPEAN PATENTS
(c) 2004 European Patent Office. All rts. reserv.

01392122
AUDIBLE ERROR DETECTOR AND CONTROLLER UTILIZING CHANNEL QUALITY DATA AND
ITERATIVE   SYNTHESIS
DETEKTOR   FUR   HORBARE   FEHLER   UND   STEUERUNG UNTER VERWENDUNG DER
KANALQUALITAT UND DER ITERATIVEN SYNTHESE
DETECTEUR ET SUPPRESSEUR D'ERREURS AUDIBLES UTILISANT DES DONNEES DE
QUALITE DU CANAL ET LA SYNTHESE ITERATIVE
PATENT ASSIGNEE:
  Nokia Corporation, (3988870), Keilalahdentie 4, 02150 Espoo, (FI),
    (Applicant designated States: all)
INVENTOR:
   VAINIO, Janne , Simunantie 8-12 B 6, FIN-33880 Lempaala, (FI)
   MIKKOLA, Hannu, J. , Ippisenkatu 15, FIN-33300 Tampere, (FI)
   ROTOLA-PUKKILA, Jani , Lehvankatu 24 E 44, FIN-33820 Tampere, (FI
LEGAL REPRESENTATIVE:
  Style, Kelda Camilla Karen et al (75491), Page White & Farrer, 54 Doughty
    Street, London WC1N 2LS, (GB)
PATENT (CC, No, Kind, Date): EP 1292943 A1 030319 (Basic)
                              WO 2001095313 011213
APPLICATION (CC, No, Date):   EP 2001936704 010604; WO 2001IB965 010604
PRIORITY (CC, No, Date): US 209860 P 000607
DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;
  LU; MC; NL; PT; SE; TR
EXTENDED DESIGNATED STATES: AL; LT; LV; MK; RO; SI
INTERNATIONAL PATENT CLASS: G10L-019/00; H04L-001/00; H04L-001/20;
  H03M-013/45
CITED PATENTS (WO A): XP 2179452
CITED REFERENCES (WO A):
  US 6230125 B1
  DE 19932943 A
  "3G TS 26.091 V3.1.0" December 1999 (1999-12) , 3GPP ORGANISATIONAL
    PARTNERS' PUBLICATIONS OFFICES XP002179452 *section 4, general*
    section 5.1, Error detection page 6;
NOTE:
  No A-document published by EPO
LEGAL STATUS (Type, Pub Date, Kind, Text):
  Application: 020213 A1 International application. (Art. 158(1))
  Application: 020213 A1 International application entering European
                            phase
  Application: 030319 A1 Published application with search report
  Examination: 030319 A1 Date of request for examination: 20030106
  Change: 030604 A1 Inventor information changed: 20030412

8/5/3   (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2004 WIPO/Univentio. All rts. reserv.

00861649   **Image available**
AUDIBLE ERROR DETECTOR AND CONTROLLER UTILIZING CHANNEL QUALITY DATA AND ITERATIVE SYNTHESIS
DETECTEUR ET SUPPRESSEUR D'ERREURS AUDIBLES UTILISANT DES DONNEES DE QUALITE DU CANAL ET LA SYNTHESE ITERATIVE
Patent Applicant/Assignee:
  NOKIA MOBILE PHONES LTD, Keilalahdentie 4, FIN-02150 Espoo, FI, FI
    (Residence), FI (Nationality)
  NOKIA INC, 6000 Connection Drive, Irving, TX 75039, US, US (Residence),
    US (Nationality), (Designated only for: LC)
Inventor(s):
  VAINIO Janne , Laurintie 16 C, FIN-33880 Lempaala, FI,
  MIKKOLA Hannu J , Ippisenkatu 15, FIN-33300 Tampere, FI,
  ROTOLA-PUKKILA Jani , Lehvankatu 24 E 44, FIN-33820 Tampere, FI
Legal Representative:
  MAGUIRE Francis J (agent), Ware, Fressola, Van Der Sluys & Adolphson LLP,
    755 Main Street, P.O. Box 224, Monroe, CT 06468, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200195313 A1 20011213 (WO 0195313)
  Application: WO 2001IB965 20010604 (PCT/WO IB0100965)
  Priority Application: US 2000209860 20000607
Designated States:
(Protection type is "patent" unless otherwise stated - for applications
prior to 2004)
  AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE
  ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT
  LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
  TR TT TZ UA UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: G10L-019/00
International Patent Class: H04L-001/00; H04L-001/20; H03M-013/45
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 4659

English Abstract
  An apparatus and method for detecting and controlling audible errors in a
  sound communication system at the receiver utilizes channel quality data
  and also **iterative synthesis** . Errors occurring in synthesized speech
  are detected by searching for atypical sound with a stringency dependent
  upon channel quality. The greater the channel quality deficiency is, the
  higher the typically standards will be. Errors are controlled by either
  re-synthesizing the signal in an interative way using typically standards
  which vary with channel quality deficiency, or by modifying the output
  signal using **typicality** standards which vary with channel quality
  deficiency, or both.

French Abstract

Cette invention se rapporte a un appareil et a un procede servant a detecter et a supprimer les erreurs audibles dans un systeme de communication sonore au niveau du recepteur et qui utilisent a cet effet des donnees de qualite du canal ainsi que la synthese iterative. Les erreurs se produisant dans une parole synthetisee sont detectees par recherche des sons atypiques avec une rigueur qui depend de la qualite du canal. Plus la deficience de la qualite du canal est grande, plus les normes de typicite sont elevees. Les erreurs sont supprimees par resynthese du signal en mode iteratif a l'aide de normes de typicite qui varient avec la deficience de la qualite du canal et/ou par modification du signal de sortie a l'aide de normes de typicite qui varient avec la deficience de la qualite du canal.

File 256:TecInfoSource 82-2004/Jul
        (c)2004 Info.Sources Inc

Set   Items   Description
S1   959   SIGNAL? ?
S2   12   S1(3N)(MODIFY? OR MODIFIE? ? OR MODIFICATION? OR CHANG??? ?
                   OR VARY??? ? OR VARIE? ? OR ADJUST?)
S3   4   S1(3N)(READJUST? OR ADAPT??? ? OR ADAPTAB? OR ALTER OR ALT-
                   ERS OR ALTERED OR ALTERING OR ALTERATION?)
S4   2   S1(3N)(EDIT??? ? OR REVIS???? ? OR REDEFIN? OR REPROGRAM? -
                   OR RECONFIGUR? OR ALTERR?)
S5   0   S1(3N)RE()(CONFIGUR? OR PROGRAM??? ? OR PROGRAMM? OR DEFIN-
                   E? ? OR DEFINI?)
S6   3   S1(3N)(RESYNTHESI? OR REPRODUC? OR REGENERAT? OR RECREAT? -
                   OR REFORM? OR RECONSTRUCT?)
S7   0   S1(3N)RE()(SYNTHESIS? OR SYNTHESIZ? OR PRODUC????? ? OR FO-
                   RM???? ? OR FORMATION?)
S8   0   S1(3N)RE()(GENERAT???? ? OR CREAT???? ? OR CONSTRUCT?)
S9   8013   CHANNEL? ? OR LINE OR LINES OR CIRCUIT??? ? OR PATH? ? OR -
                   PATHWAY? ?
S10   69   S9(2N)(QUALITY OR STATE OR STATES OR CONDITION? ? OR STATU-
                   S? OR MODE OR MODES)
S11   18661   STRINGEN? OR STANDARD? ? OR THRESHOLD? ? OR CONDITION? ? OR
                   VALUE OR VALUES OR LEVEL? ? OR PROFILE? ? OR PATTERN? ?
S12   12121   BOUND? ? OR RANGE OR RANGES OR CRITERIA? OR CRITERION? OR -
                   NORM? ? OR MODEL? ? OR RULE OR RULES OR FORMULA?
S13   3910   BASELINE? OR BASE()LINE? ? OR TEMPLATE? OR YARDSTICK? OR Y-
                   ARD()STICK? ? OR BENCHMARK? OR BENCH()MARK??? ? OR TARGET? ?
S14   595   S11:S13(3N)(MODIFY? OR MODIFIE? ? OR MODIFICATION? OR CHAN-
                   G??? ? OR VARY??? ? OR VARIE? ? OR ADJUST?)
S15   124   S11:S13(3N)(READJUST? OR ADAPT??? ? OR ADAPTAB? OR ALTER OR
                   ALTERS OR ALTERED OR ALTERING OR ALTERATION?)
S16   574   S11:S13(3N)(EDIT??? ? OR REVIS???? ? OR REDEFIN? OR REPROG-
                   RAM? OR RECONFIGUR? OR ALTERR?)
S17   0   S11:S13(3N)RE()(CONFIGUR? OR PROGRAM??? ? OR PROGRAMM? OR -
                   DEFINE? ? OR DEFINI?)
S18   2   S10(5N)(DEPEND? OR CORRELAT? OR LINK? OR INTERLINK? OR INT-
                   ERELAT? OR INTERRELAT?)
S19   0   S10(5N)(RELAT?? ? OR RELATING OR RELATION? OR CORELAT? OR -
                   CONTINGEN? OR PREDICAT? OR CIRCUMSCRIB?)
S20   4   S10(5N)(BASE OR BASED OR BASING OR SUBJECT?)
S21   1   S2:S8 AND S14:S17
S22   0   S2:S8 AND S18:S20
? t21/7

21/7/1
DIALOG(R)File 256:TecInfoSource
(c)2004 Info.Sources Inc. All rts. reserv.

00135581   DOCUMENT TYPE: Review

PRODUCT NAMES: Company--Cellonics Inc Pte Ltd (876518)

**TITLE: Brain Waves: Emulating the way signals travel around the brain
may...**
AUTHOR: Haldar, Joyita
SOURCE: tele.com,   v6 n20 p28(2) Oct 15, 2001
ISSN: 1086-7821
HOMEPAGE: http://www.teledotcom.com

RECORD TYPE: Review

REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

After three years of research on a new networking system, scientists Lye
Kin Mun and Jurianto Joe have cofounded Cellonics. Referencing mathematics
associated with biological neuron signaling and nonlinear dynamical systems
(NDSes), Cellonics approach centers on enhanced network demodulator
processing. Demodulators retrieve electrical signals from carrier **signals**
. Cellonics' approach **alters   standard** transmission and reception
technologies, speeding processing times. Modulator circuits transform each
data bit into an analog radio frequency (RF) wave shape, termed a 'slow
wave.' With demodulation, RF waves are converted back to a pulse composed
of multiple spikes. This is termed a 'fast wave.' Wave spikes are
associated with digital numbers, extending beyond standard binary
constraints. Paul Ho, electrical engineering professor at the National
University of Singapore, believes that the error rates of Cellonics' system
match those of linear receivers. However, the firm will have to develop new
receivers for the system. Cellonics currently is looking for a
manufacturing partner.

REVISION DATE: 20030330

Set	Items	Description
S1	2295052	SIGNAL? ?
S2	107769	S1(3N)(MODIFY? OR MODIFIE? ? OR MODIFICATION? OR CHANG??? ? OR VARY??? ? OR VARIE? ? OR ADJUST?)
S3	11975	S1(3N)(READJUST? OR ADAPT??? ? OR ADAPTAB? OR ALTER OR ALTERS OR ALTERED OR ALTERING OR ALTERATION?)
S4	2648	S1(3N)(EDIT??? ? OR REVIS???? ? OR REDEFIN? OR REPROGRAM? - OR RECONFIGUR? OR ALTERR?)
S5	35	S1(3N)RE()(CONFIGUR? OR PROGRAM??? ? OR PROGRAMM? OR DEFINE? ? OR DEFINI?)
S6	70494	S1(3N)(RESYNTHESI? OR REPRODUC? OR REGENERAT? OR RECREAT? - OR REFORM? OR RECONSTRUCT?)
S7	48	S1(3N)RE()(SYNTHESIS? OR SYNTHESIZ? OR PRODUC????? ? OR FORM???? ? OR FORMATION?)
S8	60	S1(3N)RE()(GENERAT???? ? OR CREAT???? ? OR CONSTRUCT?)
S9	4234348	CHANNEL? ? OR LINE OR LINES OR CIRCUIT??? ? OR PATH? ? OR - PATHWAY? ?
S10	68036	S9(2N)(QUALITY OR STATE OR STATES OR CONDITION? ? OR STATUS? OR MODE OR MODES)
S11	3877080	STRINGEN? OR STANDARD? ? OR THRESHOLD? ? OR CONDITION? ? OR VALUE OR VALUES OR LEVEL? ? OR PROFILE? ? OR PATTERN? ?
S12	1861347	BOUND? ? OR RANGE OR RANGES OR CRITERIA? OR CRITERION? OR - NORM? ? OR MODEL? ? OR RULE OR RULES OR FORMULA?
S13	256874	BASELINE? OR BASE()LINE? ? OR TEMPLATE? OR YARDSTICK? OR YARD()STICK? ? OR BENCHMARK? OR BENCH()MARK??? ? OR TARGET? ?
S14	244566	S11:S13(3N)(MODIFY? OR MODIFIE? ? OR MODIFICATION? OR CHANG??? ? OR VARY??? ? OR VARIE? ? OR ADJUST?)
S15	23656	S11:S13(3N)(READJUST? OR ADAPT??? ? OR ADAPTAB? OR ALTER OR ALTERS OR ALTERED OR ALTERING OR ALTERATION?)
S16	4811	S11:S13(3N)(EDIT??? ? OR REVIS???? ? OR REDEFIN? OR REPROGRAM? OR RECONFIGUR? OR ALTERR?)
S17	40	S11:S13(3N)RE()(CONFIGUR? OR PROGRAM??? ? OR PROGRAMM? OR - DEFINE? ? OR DEFINI?)
S18	897	S10(5N)(DEPEND? OR CORRELAT? OR LINK? OR INTERLINK? OR INTERELAT? OR INTERRELAT?)
S19	271	S10(5N)(RELAT?? ? OR RELATING OR RELATION? OR CORELAT? OR - CONTINGEN? OR PREDICAT? OR CIRCUMSCRIB?)
S20	2571	S10(5N)(BASE OR BASED OR BASING OR SUBJECT?)
S21	23603	S2:S8 AND S14:S17
S22	459	S21 AND S10
S23	160	S2:S8 AND S14:S17(15N)S10
S24	140	S2:S8 AND S18:S20
S25	7545	IC='G10L-019'
S26	5747	IC='G10L-013'
S27	32210	IC='H04L-001'
S28	15381	IC='H03M-013'
S29	11683	MC='U21-A06'
S30	7135	MC='W01-A01'
S31	4811	MC='W01-A01C'
S32	3532	MC='W04-V05G'
S33	18	S22 AND S25:S32
S34	11	S24 AND S25:S32
S35	19	S23 AND S24
S36	11720	S2:S8(5N)(SPEECH? OR SPOK? OR SPEAK? OR SOUND OR AUDIO OR - ACOUSTIC? OR PHONIC? OR AURAL OR SONIC?)

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S37      1660   S2:S8(5N)(ITERATIV? OR PERIODIC? OR RECURR? OR FREQUENT? OR
                    OCCASIONAL? OR CONTINUAL? OR REPEAT?)
S38      1401   S2:S8(5N)(REPETITIOUS? OR SYSTEMATIC? OR CONTINUOUS?)
S39        17   S22 AND S36:S38
S40         8   S24 AND S36:S38
S41        60   S33:S35 OR S39:S40
S42        60   IDPAT (sorted in duplicate/non-duplicate order)
S43        60   IDPAT (primary/non-duplicate records only)
```

43/9/2   (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

016114137   **Image available**
WPI Acc No: 2004-272013/200426
XRPX Acc No: N04-215269
  **Point-to-point wireless telecommunication system, has transmitter with
  variable modulator, and receiver with variable demodulator for** changing
  modulation level **in response to possible degrades and disturbs in radio
  channel**
Patent Assignee: ALCATEL (COGE)
Inventor: ANGELONI T F; COLOMBO C; FRECASSETTI M G; PELLIZZONI R; VALTOLINA
  R
Number of Countries: 030 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 1406405	A1	20040407	EP 2002292447	A	20021004	200426	B

Priority Applications (No Type Date): EP 2002292447 A 20021004
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 1406405	A1	E	10	H04L-001/00	

    Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
    GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

Abstract (Basic): EP 1406405 A1
        NOVELTY - The system has a transmitter (10) with a variable
    modulator (24), and a receiver with a variable demodulator for
    changing a modulation costellation/ **level** in response to possible
    degrades and/or disturbs in a radio channel and/or changes of
    transmission capacity requirements. The modulator and demodulator
    operate according to a quadrature amplitude modulation (QAM) scheme.
        DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a
    method for point-to-point radio transmitting **signal** through an
    adaptive point-to-point wireless telecommunication system.
        USE - Used for a point-to-point wireless telecommunication system.
        ADVANTAGE - The system is dynamically **changing** the modulation
    level according to both capacity requirements and radio **channel
    conditions** .
        DESCRIPTION OF DRAWING(S) - The drawing shows a schematic view of a
    transmitter side of a system.
        Transmitter (10)
        Signals (121-12n)
        Input interfaces (141-14n)
        Queue blocks (161-16n)
        Mapper (22)
        Variable modulator (24)
        pp; 10 DwgNo 1/4
Title Terms: POINT; POINT; WIRELESS; TELECOMMUNICATION; SYSTEM; TRANSMIT;
  VARIABLE; MODULATE; RECEIVE; VARIABLE; DEMODULATE; CHANGE; MODULATE;

LEVEL; RESPOND; POSSIBILITY; DEGRADE; DISTURB; RADIO; CHANNEL
Derwent Class: U23; W01; W02
International Patent Class (Main): **H04L-001/00**
International Patent Class (Additional): H04L-027/34
File Segment: EPI
Manual Codes (EPI/S-X): U23-P01; **W01-A01** ; W01-A09C; W02-C03D1; W02-G01D;
  W02-G03E

 43/9/4   (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

015738820   **Image available**
WPI Acc No: 2003-801021/200375
XRPX Acc No: N03-641915
  **Amplifier module for optical telecommunication network, has signal
  processor which** adjusts **operating conditions of fiber amplifier, such
  that fiber amplifier gain does not exceed deviation limit of set point
  gain**
Patent Assignee: KOKUSAI DENKI KK (KOKZ); HITACHI KOKUSAI DENKI KK (KOKZ
  ); FLINTHAM B (FLIN-I); GRIGGS R D (GRIG-I); NORTEL NETWORKS LTD (NELE)
Inventor: FLINTHAM B; GRIGGS R D
Number of Countries: 003 Number of Patents: 004
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
US 20020196531 A1   20021226 US 2002109216   A   20020328 200375 B
JP 2003007697 A   20030110 JP 2001187468   A   20010621 200375
KR 2002096860 A   20021231 KR 200215531   A   20020322 200375
US 6687050   B2   20040203 US 2002109216   A   20020328 200413

Priority Applications (No Type Date): JP 2001187468 A 20010621
Patent Details:
Patent No   Kind Lan Pg   Main IPC   Filing Notes
US 20020196531 A1   8 H01S-003/00
JP 2003007697 A   8 H01L-021/316
KR 2002096860 A   H01L-021/205
US 6687050   B2   H01S-003/00

Abstract (Basic): US 20020196531 A1
     NOVELTY - A fiber amplifier (102) having a set point gain,
  amplifies a multiplexed optical stream. A **signal** processor (108)
  adjusts the operating **conditions** of the fiber amplifier, **based** on
  the **channel** loading **condition** , such that the fiber amplifier gain
  does not exceed deviation limit of the set point gain.
     DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
  following:
     (1) optical fiber link;
     (2) node in optical fiber link; and
     (3) method of operating amplifier module.
     USE - For optical fiber link (claimed) in optical telecommunication
  network.
     ADVANTAGE - Since the gain is controlled within the deviation
  limit, signal to noise ratio of the channels is improved. Bit error
  rate of the channel is reduced, thereby improving the performance of
  the amplifier module. Hence carrying capacity of the optical link is
  increased, without using additional components.
     DESCRIPTION OF DRAWING(S) - The figure shows the circuit diagram of
  the amplifier system.
     amplifier module (101)

fiber amplifier (102)
          signal processor (108)
          input fiber (114)
          power controller (118)
          detection circuit (130)
          link (202)
          pp; 8 DwgNo 2/3
Title Terms: AMPLIFY; MODULE; OPTICAL; TELECOMMUNICATION; NETWORK; SIGNAL;
   PROCESSOR; ADJUST; OPERATE; CONDITION; AMPLIFY; AMPLIFY; GAIN; DEVIATE;
   LIMIT; SET; POINT; GAIN
Derwent Class: V07; W02
International Patent Class (Main): H01L-021/205; H01L-021/316; H01S-003/00
International Patent Class (Additional): C23C-016/40; C23C-016/56;
   H01L-021/31; H04B-010/12
File Segment: EPI
Manual Codes (EPI/S-X): V07-K01C2; W02-C04B1

 43/9/6   (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

015583108   **Image available**
WPI Acc No: 2003-645265/200361
XRPX Acc No: N03-513347
   Forward-link signal **power** adjustment **method in mobile communication
   system, involves comparing parameter estimated using received channel**
   quality based **on pilot signal with** target value **for** adjusting
   transmission power of signal
Patent Assignee: LG ELECTRONICS INC (GLDS)
Inventor: KIM G J; LEE Y J; YOO C U; KIM K; YOU C W
Number of Countries: 002 Number of Patents: 002
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
US 20030109221 A1   20030612 US 2002310795   A   20021206 200361 B
KR 2003046977 A   20030618 KR 200177323   A   20011207 200370

Priority Applications (No Type Date): KR 200177323 A 20011207
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
US 20030109221 A1   13 H04B-007/185
KR 2003046977 A   H04B-007/26
Abstract (Basic): US 20030109221 A1
        NOVELTY - A power control parameter is estimated using received
   channel   quality value **based** on power control group of pilot signal
   and comparing the parameter with a target value. The transmission power
   of the corresponding power control group of the forward-link **signal**
   is **adjusted** according to the comparison result.
        USE - For adjusting physical channel power in mobile communication
   system.
        ADVANTAGE - Enables an efficient power control, thus the power
   consumption of the transmitting end in greatly reduced to effect the
   cost reduction.
        DESCRIPTION OF DRAWING(S) - The figures show the block diagrams of
   the forward-link **signal** power **adjustment** in mobile communication
   system.
        pp; 13 DwgNo 1A, 1B/5
Title Terms: FORWARD; LINK; SIGNAL; POWER; ADJUST; METHOD; MOBILE;
   COMMUNICATE; SYSTEM; COMPARE; PARAMETER; ESTIMATE; RECEIVE; CHANNEL;
   QUALITY; BASED; PILOT; SIGNAL; TARGET; VALUE; ADJUST; TRANSMISSION; POWER

; SIGNAL
Derwent Class: W01; W02
International Patent Class (Main): H04B-007/185; H04B-007/26
International Patent Class (Additional): H04B-007/00; H04Q-007/20
File Segment: EPI
Manual Codes (EPI/S-X): W01-B05A1A; W02-C03B1A; W02-C03C1A; W02-C03E3

43/9/7   (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

015395554   **Image available**
WPI Acc No: 2003-457695/200343
XRPX Acc No: N03-363932
   Decoding delta modulated signal by changing **bit** pattern **to retain or decrease decoding step size**
Patent Assignee: TELEFONAKTIEBOLAGET ERICSSON L M (TELF)
Inventor: ZURBES S; ZUERBES S
Number of Countries: 098 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200346888	A1	20030605	WO 2001EP13977	A	20011129	200343	B
AU 2002219148	A1	20030610	WO 2001EP13977	A	20011129	200419	
			AU 2002219148	A	20011129		

Priority Applications (No Type Date): WO 2001EP13977 A 20011129
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200346888	A1	E	28	G10L-019/00	

   Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
   CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
   IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
   PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
   Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
   IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
AU 2002219148 A1   G10L-019/00   Based on patent WO 200346888

Abstract (Basic): WO 200346888 A1
     NOVELTY - Method consists in receiving the delta modulated signal
   over an erroneous **channel** , determining a **quality** estimate
   indicative of the instantaneous bit error rate and a threshold
   decision, assessing the estimate and preventing or reducing an increase
   of the step size by **changing** a first bit **pattern** into a second and
   generating a dedicated control signal for a decoder.
        DETAILED DESCRIPTION - There are INDEPENDENT CLAIMS for:
        (1) A computer program for delta modulation decoding
        (2) A delta modulated signals decoder stage receiver
        (3) A communications system
        USE - Method is for decoding delta modulated **signals** using an
   adaptively **varied** decoding step size.
        ADVANTAGE - Method is less vulnerable to interference signals like
   short error bursts.
        DESCRIPTION OF DRAWING(S) - The figure shows a receiver stage for
   decoding a delta modulated signal.
        pp; 28 DwgNo 4/5
Title Terms: DECODE; DELTA; MODULATE; SIGNAL; CHANGE; BIT; PATTERN; RETAIN;
  DECREASE; DECODE; STEP; SIZE
Derwent Class: P86; W01; W02; W04
International Patent Class (Main): **G10L-019/00**
International Patent Class (Additional): H04B-014/06; H04B-014/066

43/9/8   (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

015368392   **Image available**
WPI Acc No: 2003-429330/200340
Related WPI Acc No: 2003-392562
XRPX Acc No: N03-342773
   **Bit error concealing method for digital speech signal coding, involves
   comparing decoded signal parameter with set limitations based on which
   invalid parameter is identified**
Patent Assignee: BROADCOM CORP (BROA-N)
Inventor: CHEN J
Number of Countries: 031 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20030036382	A1	20030220	US 2001312794	P	20010817	200340	B
			US 2002344378	P	20020104		
			US 2002222936	A	20020819		
WO 200317255	A1	20030227	WO 2002US26315	A	20020819	200340	
WO 200317555	A2	20030227	WO 2002US26254	A	20020819	200340	
EP 1425562	A2	20040609	EP 2002759394	A	20020819	200438	
			WO 2002US26254	A	20020819		
EP 1428206	A1	20040616	EP 2002757218	A	20020819	200439	
			WO 2002US26315	A	20020819		

Priority Applications (No Type Date): US 2002222936 A 20020819; US
   2001312794 P 20010817; US 2002344378 P 20020104
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030036382	A1		22	H04Q-007/20	Provisional application US 2001312794

                                Provisional application US 2002344378
WO 200317255 A1 E   G10L-019/14
   Designated States (Regional): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
   IE IT LU MC NL PT SE SK TR
WO 200317555 A2 E   H04L-000/00
   Designated States (Regional): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
   IE IT LU MC NL PT SE SK TR
EP 1425562   A2 E   G01L-011/00   Based on patent WO 200317555
   Designated States (Regional): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
   IE IT LI LU MC NL PT SE SK TR
EP 1428206   A1 E   G10L-019/14   Based on patent WO 200317255
   Designated States (Regional): AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
   GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR

Abstract (Basic): US 20030036382 A1
      NOVELTY - A signal parameter is encoded according to set
   limitations defined using signal parameter quantizer and the encoded
   signal parameter is compared with the limitations. When the limitations
   are violated, the decoded parameter is judged to be invalid. The
   invalid **signal** parameter is **changed** based on the **value** obtained
   from adjacent parameters.
      DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
   following:
      (1) bit error detection method;
      (2) bit error detecting limitations design method;

```
      (3) threshold function definition method;
      (4) signal encoding method;
      (5) signal decoding method;
      (6) computer readable medium storing bit error concealing program;
      (7) computer readable storing bit error detection program;
      (8) computer readable medium storing threshold function defining
program;
      (9) computer readable medium storing encoding instructions;
      (10) computer readable medium storing decoding instructions;
      (11) bit error concealing apparatus;
      (12) bit error detecting limitations setting apparatus;
      (13) threshold function defining apparatus;
      (14) bit error detector;
      (15) signal encoder; and
      (16) signal decoder.
      USE - For digital speech signal coding system, digital
communication.
      ADVANTAGE - Improves speech **quality** by optimizing **channel**
quantization without any noise. Enables quantizing different speech
parameters irrespective of redundant factors.
      DESCRIPTION OF DRAWING(S) - The figure shows the flowchart
representing the encoding process.
      pp; 22 DwgNo 1/8
Title Terms: BIT; ERROR; CONCEAL; METHOD; DIGITAL; SPEECH; SIGNAL; CODE;
  COMPARE; DECODE; SIGNAL; PARAMETER; SET; LIMIT; BASED; INVALID; PARAMETER
  ; IDENTIFY
Derwent Class: P86; T01; W04
International Patent Class (Main): G01L-011/00;  **G10L-019/14** ; H04L-000/00;
  H04Q-007/20
International Patent Class (Additional): G01L-019/00; G10L-021/02
File Segment: EPI; EngPI
Manual Codes (EPI/S-X): T01-S03; W04-V05E;  **W04-V05G**
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 43/9/9   (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

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015041198    **Image available**
WPI Acc No: 2003-101714/200309
XRPX Acc No: N03-081180
   Output-based speech quality evaluation method for voice communication
   system, involves comparing unknown corrupted speech signal to speech
   reference vectors of clean speech samples to determine distortions
Patent Assignee: QWEST COMMUNICATIONS INT INC (QWES-N)
Inventor: BAYYA A; VIS M
Number of Countries: 001  Number of Patents: 001
Patent Family:
Patent No     Kind   Date      Applicat No    Kind   Date      Week
US 6446038     B1    20020903  US 96627249     A    19960401  200309  B

Priority Applications (No Type Date): US 96627249 A 19960401
Patent Details:
Patent No  Kind Lan Pg   Main IPC     Filing Notes
US 6446038     B1      8 G10L-015/00

Abstract (Basic): US 6446038 B1
      NOVELTY - An unknown corrupted speech signal is compared to speech
   reference vectors that correspond to known clean speech samples, to
   determine distortions. The quality of the unknown corrupted speech
   signal is evaluated, and a score is generated based on the distortions.
```

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:
(1) Speech quality evaluating system in voice communication system; and
(2) Computer readable medium storing speech quality evaluating program.
USE - For evaluating quality of speech using corrupted output in voice communication system.
ADVANTAGE - The subjective score serves as indication of user acceptance of **speech signals** recorded under **varying** noise **conditions** and **channel** impairments as well as signals **subjected** to various noise suppression/signal enhancement techniques. Thus, predicts listener preference accurately by correlating highly with subjective scores over all possible distortions and noise types.
DESCRIPTION OF DRAWING(S) - The figure shows the block diagram illustrating the training process utilized to obtain speech reference vectors.
pp; 8 DwgNo 2/6
Title Terms: OUTPUT; BASED; SPEECH; QUALITY; EVALUATE; METHOD; VOICE; COMMUNICATE; SYSTEM; COMPARE; UNKNOWN; SPEECH; SIGNAL; SPEECH; REFERENCE; VECTOR; CLEAN; SPEECH; SAMPLE; DETERMINE; DISTORT
Derwent Class: P86; T01; W04
International Patent Class (Main): G10L-015/00
File Segment: EPI; EngPI
Manual Codes (EPI/S-X): T01-C08A; T01-N02B2; T01-S03; W04-V

43/9/10   (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

015007390   **Image available**
WPI Acc No: 2003-067907/200306
XRPX Acc No: N03-052668
Data processing method for receiver in MIMO communication system involves determining CSI indicating characteristics of MIMO channel for sending data streams processed in transmitter based on CSI part
Patent Assignee: QUALCOMM INC (QUAL-N); HOWARD S J (HOWA-I); KETCHUM J W (KETC-I); WALLACE M (WALL-I); WALTON J R (WALT-I)
Inventor: HOWARD S J; KETCHUM J W; WALLACE M; WALTON J R; WALLACE M S
Number of Countries: 102 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200293784	A1	20021121	WO 2002US14526	A	20020507	200306	B
US 20030035491	A1	20030220	US 2001854235	A	20010511	200316	
EP 1386424	A1	20040204	EP 2002736690	A	20020507	200410	
			WO 2002US14526	A	20020507		
NO 200304981	A	20040106	WO 2002US14526	A	20020507	200412	
			NO 20034981	A	20031110		
KR 2003093346	A	20031206	KR 2003714560	A	20031107	200425	
TW 564604	A	20031201	TW 2002109683	A	20020509	200431	

Priority Applications (No Type Date): US 2001854235 A 20010511
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200293784	A1	E	79	H04B-007/08	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR

```
         IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
US 20030035491 A1          H04L-001/02
EP 1386424    A1 E    H04B-007/08    Based on patent WO 200293784
   Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
   LI LT LU LV MC MK NL PT RO SE SI TR
NO 200304981  A       H04B-007/08
KR 2003093346 A       H04L-001/06.
TW 564604     A       H04B-007/02
```

Abstract (Basic): WO 200293784 A1
  NOVELTY - A decoded data stream is provided by processing the input
signals with the symbol streams corresponding to the data streams. The
modified signals without the components due to the decoded data
stream are derived **based** on the input signals. A **channel state**
information (CSI) indicating the characteristics of a MIMO channel for
sending the data streams processed at a transmitter based on a CSI
part, is determined.
  DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
following:
  (a) a data transmission method;
  (b) a receiver;
  (c) and a MIMO communication system.
  USE - For receiver in multiple-input multiple-output communication
system.
  ADVANTAGE - Ensures high performance for MIMO communication system
by using combination of successive cancellation receiver processing
technique and adaptive transmitter processing technique. Enables
adjusting data processing in transmitter before data transmission based
on estimated characteristic of MIMO channel.
  DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of a
receiver system.
  pp; 79 DwgNo 5/9
Title Terms: DATA; PROCESS; METHOD; RECEIVE; COMMUNICATE; SYSTEM; DETERMINE
 ; INDICATE; CHARACTERISTIC; CHANNEL; SEND; DATA; STREAM; PROCESS;
 TRANSMIT; BASED; PART
Derwent Class: W01; W02
International Patent Class (Main): H04B-007/02; H04B-007/08; **H04L-001/02** ;
 H04L-001/06
International Patent Class (Additional): H04B-001/00; H04B-007/06;
 H04K-001/10; H04L-027/28
File Segment: EPI
Manual Codes (EPI/S-X): W01-A01A; W01-A03; W02-C03A1A

43/9/11 (Item 11 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

014783487   **Image available**
WPI Acc No: 2002-604193/200265
XRPX Acc No: N02-479242
 Audio packet signal lack correction circuit for telecommunication system,
 has compensator which rectifies discontinuous points in audio signal
 output from decoder, based **on operation** state **of switching** circuit
Patent Assignee: NIPPON DENKI ENG KK (NIDE)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2002204221	A	20020719	JP 2000401130	A	20001228	200265	B

Priority Applications (No Type Date): JP 2000401130 A 20001228

Patent Details:
Patent No   Kind Lan Pg   Main IPC   Filing Notes
JP 2002204221 A   7 H04L-001/00

Abstract (Basic): JP 2002204221 A
        NOVELTY - A switching circuit (4) outputs a voice parameter output
    from a delay buffer (2), when abandonment of a packet is detected. A
    decoder (5) outputs an audio signal by decoding the voice parameter. A
    compensator rectifies the discontinuous points in the audio signal,
    based on operation state of the switching circuit.
        USE - For telecommunication system.
        ADVANTAGE - The quality of **reproduced   audio   signal** is
    ensured, by rectifying the discontinuous points in **reproduced   audio
    signal** using the compensator.
        DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of
    the audio packet signal lack correction circuit. (Drawing includes
    non-English language text).
        Delay buffer (2)
        Switching circuit (4)
        Decoder (5)
        pp; 7 DwgNo 1/8
Title Terms: AUDIO; PACKET; SIGNAL; LACK; CORRECT; CIRCUIT;
   TELECOMMUNICATION; SYSTEM; COMPENSATE; RECTIFY; DISCONTINUE; POINT; AUDIO
   ; SIGNAL; OUTPUT; DECODE; BASED; OPERATE; STATE; SWITCH; CIRCUIT
Derwent Class: P86; W01; W04
International Patent Class (Main): **H04L-001/00**
International Patent Class (Additional): **G10L-013/00 ;   G10L-019/00**
File Segment: EPI; EngPI
Manual Codes (EPI/S-X): **W01-A01 ; W04-V; W04-V05G**

   43/9/12   (Item 12 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

014447796   **Image available**
WPI Acc No: 2002-268499/200231
XRPX Acc No: N02-208956
   Audible error detector and controller utilizing channel   quality **data
   and iterative synthesis, errors occurring in synthesized speech are
   detected by searching for typical sound with stringency** dependent **upon**
   channel   quality
Patent Assignee: NOKIA CORP (OYNO); NOKIA INC (OYNO); MIKKOLA H J
   (MIKK-I); ROTOLA-PUKKILA J (ROTO-I); VAINIO J (VAIN-I); NOKIA MOBILE
   PHONES LTD (OYNO)
Inventor: MIKKOLA H J; ROTOLA-PUKKILA J; VAINIO J
Number of Countries: 095 Number of Patents: 005
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
WO 200195313   A1   20011213 WO 2001IB965   A   20010604 200231 B
AU 200162571   A   20011217 AU 200162571   A   20010604 200231
US 20020002456 A1   20020103 US 2000209860   P   20000607 200231
                                US 2001852127   A   20010509
EP 1292943   A1   20030319 EP 2001936704   A   20010604 200322
                                WO 2001IB965   A   20010604
CN 1433562   A   20030730 CN 2001810686   A   20010604 200365

Priority Applications (No Type Date): US 2000209860 P 20000607; US
   2001852127 A 20010509
Patent Details:

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Patent No   Kind Lan Pg    Main IPC      Filing Notes
WO 200195313  A1 E   23 G10L-019/00
     Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
     CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP
     KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT
     RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
     Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
     IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
AU 200162571  A        G10L-019/00    Based on patent WO 200195313
US 20020002456 A1       G10L-013/00    Provisional application US 2000209860

EP 1292943   A1 E    G10L-019/00    Based on patent WO 200195313
     Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
     LI LT LU LV MC MK NL PT RO SE SI TR
CN 1433562    A        G10L-019/00
```

Abstract (Basic): WO 200195313 A1
        NOVELTY - Errors occurring in synthesized speech are detected by
    searching for atypical sound with a stringency · **dependent** upon
    channel   quality . The greater the **channel   quality** deficiency is,
    the higher the typically standards will be. Errors are controlled by
    either **re - synthesizing** the **signal** in an **iterative** way using
    typically **standards** which **vary** with **channel   quality** deficiency,
    or by **modifying** the output **signal** using typicality **standards**
    which **vary** with **channel   quality** deficiency, or both.
        DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a
    method
        USE - For audible communication. For speech coding and channel
    coding
        ADVANTAGE - Improves detection and concealment of audio errors
    occurring as result of imperfect transmission **channel   quality**
        DESCRIPTION OF DRAWING(S) - The figure shows a diagrammatic
    representation of the iterative processor.
        pp; 23 DwgNo 3/3
Title Terms: AUDIBLE; ERROR; DETECT; CONTROL; UTILISE; CHANNEL; QUALITY;
   DATA; ITERATIVE; SYNTHESIS; ERROR; OCCUR; SYNTHESIS; SPEECH; DETECT;
   SEARCH; TYPICAL; SOUND; DEPEND; CHANNEL; QUALITY
Derwent Class: P86; U21; W01; W04
International Patent Class (Main): **G10L-013/00 ; G10L-019/00**
International Patent Class (Additional): **H03M-013/45 ; ·H04L-001/00 ;**
   H04L-001/20
File Segment: EPI; EngPI
Manual Codes (EPI/S-X): **U21-A06 ; W01-A01 ; W01-A01C ; W04-V05G**
? t43/9/14,17-21,23

 43/9/14   (Item 14 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

014074805   **Image available**
WPI Acc No: 2001-559018/200163
XRPX Acc No: N01-415512
   **Voice coding apparatus for coding background noise signal on voice
   signal, has multiplexer that locally** reproduces **synchronized** signal
   **using smoothed signal and feeding out combination of outputs of preset
   circuits**
Patent Assignee: NEC CORP (NIDE)
Inventor: OZAWA K
Number of Countries: 028   Number of Patents: 003
Patent Family:

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Patent No      Kind   Date     Applicat No     Kind    Date      Week
EP 1100076     A2    20010516  EP 2000124232    A     20001109  200163  B
JP 2001142499  A     20010525  JP 99319534      A     19991110  200163
CA 2325322     A1    20010510  CA 2325322       A     20001109  200163
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Priority Applications (No Type Date): JP 99319534 A 19991110
Patent Details:
```
Patent No  Kind Lan Pg   Main IPC     Filing Notes
EP 1100076    A2 E   16 G10L-019/14
   Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
   LI LT LU LV MC MK NL PT RO SE SI TR
JP 2001142499 A      15 G10L-019/12
CA 2325322    A1 E      G10L-019/12
```

Abstract (Basic): EP 1100076 A2
      NOVELTY - Discriminating circuit (300) judges if pertinent mode is
a preset mode based on feature quantity extracted from voice signal.
Smoothing circuit (450) executes time-wise smoothing of either gain or
level of excitation **signal** , **adaptive** codebook gain, spectral
parameter, using which multiplexer (400) **reproduces** synthesized
signal and feeds out combination of outputs of parameter calculating,
mode discriminating, adaptive codebook, excitation and gain quantizing
circuits.
      DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
following:
      (a) Voice decoding apparatus;
      (b) Voice coding method;
      (c) Voice decoding method
      USE - For coding background noise signal superimposed on voice
signal even at a low bit rate.
      ADVANTAGE - Provides coded voice less subject to sound quality
deterioration by suppressing local time-wise parameter variations in
the background noise part even at a low bit, since a synthesized
signal is locally **reproduced** using the data obtained by time-wise
smoothing of either one of spectral parameter gain of adaptive
codebook, gain of excitation codebook and RMS of excitation signal.
Satisfactorily codes the background noise part without adversely
affecting the voice time section, even when the coding voice is
superimposed with background noise at a low bit, by executing process
only in a particular time section.
      DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of
voice coding apparatus.
      Mode discriminating **circuit** (300)
      Multiplexer (400)
      Smoothing circuit (450)
      pp; 16 DwgNo 1/3
Title Terms: VOICE; CODE; APPARATUS; CODE; BACKGROUND; NOISE; SIGNAL; VOICE
 ; SIGNAL; MULTIPLEX; LOCAL; REPRODUCE; SIGNAL; SMOOTH; SIGNAL; FEED;
  COMBINATION; OUTPUT; PRESET; CIRCUIT
Derwent Class: P86; W04
International Patent Class (Main): **G10L-019/12** ; **G10L-019/14**
International Patent Class (Additional): G10L-011/06
File Segment: EPI; EngPI
Manual Codes (EPI/S-X): **W04-V05G**

 43/9/17   **(Item 17 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

 013867478   **Image available**

WPI Acc No: 2001-351690/200137
XRPX Acc No: N01-255321
  **Image data transmission system for news broadcasting receiver, has image
  signal encoding parameter which changes automatically, to reduce error
  detected due to degradation of transmission quality**
Patent Assignee: KOKUSAI DENKI KK (KOKZ)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2001111995	A	20010420	JP 99291248	A	19991013	200137	B

Priority Applications (No Type Date): JP 99291248 A 19991013
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001111995	A		8	H04N-007/24	

Abstract (Basic): JP 2001111995 A
      NOVELTY - A transmitter (3) transmits encoded image signal to
  receiver (4) through transmission line, **based** on which transmission
  quality of transmission **line** is detected. The presence of defect in
  transmission line is indicated to transmitter. The image **signal**
  encoding parameter is **changed** automatically, to reduce error detected
  due to degradation of transmission quality.
      USE - For transmission of image data picked up by television camera
  which is broadcast to remote places e.g. for news broadcasting.
      ADVANTAGE - The defect in transmission line is detected by
  transmitting encoded image data, due to which the disorder in receiving
  the image is prevented.
      DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of
  image data transmission system. (Drawing includes non-English language
  text).
      Transmitter (3)
      Receiver (4)
      pp; 8 DwgNo 1/3
Title Terms: IMAGE; DATA; TRANSMISSION; SYSTEM; NEWS; BROADCAST; RECEIVE;
  IMAGE; SIGNAL; ENCODE; PARAMETER; CHANGE; AUTOMATIC; REDUCE; ERROR;
  DETECT; DEGRADE; TRANSMISSION; QUALITY
Derwent Class: W01; W02
International Patent Class (Main): H04N-007/24
International Patent Class (Additional): H04B-014/04; **H04L-001/00 ;**
  H04M-011/00; H04N-001/41
File Segment: EPI
Manual Codes (EPI/S-X): **W01-A01 ;** W01-C05; W01-C05B3F; W02-C06; W02-F07;
  W02-J03B

 43/9/18   (Item 18 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

013712552   **Image available**
WPI Acc No: 2001-196776/200120
XRPX Acc No: N01-140652
  Video signal **recording and** reproducing **method for use in vehicle,
  involves transmitting discarded data to decoder after synthesizing data
  read from memory**
Patent Assignee: KOKUSAI DENSHIN DENWA CO LTD (KOKU)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week

JP 2001016585 A 20010119 JP 99185212 A 19990630 200120 B

Priority Applications (No Type Date): JP 99185212 A 19990630
Patent Details:
Patent No Kind Lan Pg Main IPC Filing Notes
JP 2001016585 A 6 H04N-007/24

Abstract (Basic): JP 2001016585 A
NOVELTY - The bit rate of video **signal** is **changed**, **depending** on transmission **line** **quality** to produce transmitting data. A control parameter which shows the deleted video data to transmitting data is transmitted along with video frame pointer from beginning of transmission. A video synthesizer (18) in receiving side synthesizes data read from memory (16) and transmits discarded data to video decoder (13).
DETAILED DESCRIPTION - A memory (16) in receiving side receives decoded video data from decoder (12). An addition data extractor (17) extracts additional data such as control parameter, video frame pointer from memory (16). Based on additional data, discarded data are read from memory (6) and transmitted to decoder (13). An INDEPENDENT CLAIM is also included for video **signal** recording and **reproducing** apparatus.
USE - In vehicle for recording and **reproducing** video **signal** transmitted to vehicle via transmission line using e.g. transmission control protocol/internet protocol.
ADVANTAGE - Enables high resolution image to be reproduced and displayed. Prevents reduction in utilization efficiency of transmission line.
DESCRIPTION OF DRAWING(S) - The figure shows block diagram of recording and reproducing apparatus.
Memories (6,16)
Decoders (12,13)
Extractor (17)
Synthesizer (18)
pp; 6 DwgNo 1/4
Title Terms: VIDEO; SIGNAL; RECORD; REPRODUCE; METHOD; VEHICLE; TRANSMIT; DISCARDED; DATA; DECODE; AFTER; DATA; READ; MEMORY
Derwent Class: T03; W01; W02; W04
International Patent Class (Main): H04N-007/24
International Patent Class (Additional): G11B-020/10; **H04L-001/00**; H04N-005/92
File Segment: EPI
Manual Codes (EPI/S-X): T03-P01; **W01-A01**; W02-F07; W04-F01

43/9/19   (Item 19 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

013706358   **Image available**
WPI Acc No: 2001-190582/200119
XRPX Acc No: N01-135400
  Voice communication system for mobile communication application, has voice decoder to decode received signals based **on signal output from** channel state **estimator**
Patent Assignee: COMSAT CORP (COMS-N)
Inventor: BHASKAR B R R U; HEMMATI F
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week

US 6154499   A   20001128 US 96734086   A   19961021 200119 B

Priority Applications (No Type Date): US 96734086 A 19961021
Patent Details:
Patent No   Kind Lan Pg   Main IPC   Filing Notes
US 6154499   A   18 H04L-027/00

Abstract (Basic): US 6154499 A
        NOVELTY - The nested voice code of voice encoder generates a
    multiple levels of encoded speech signals. The channel encoder encodes
    the level and transmits data at highest rate of generated level. The
    channel   state estimator (710) estimates the **channel   state   based**
     on which voice decoder (706) decodes the received signals at any one
    of the levels.
        DETAILED DESCRIPTION - The basic level having **speech   signals**
    sufficient to **reproduce** at least an intelligent content of speech and
    other level comprising voice parameters representative of voice is
    progressive manner are generated by nested voice coder. INDEPENDENT
    CLAIMS are also included for the following:
        (a) receiver;
        (b) voice communication method
        USE - E.g. two-way voice pager, HF-VHF packet radio for mobile
    applications such as land mobile vehicles aeronautical and maritime
    systems.
        ADVANTAGE - Since decoder can adopt to **channel   state   varying**
    conditions by using reliable subset of bits, intelligible and
    efficient voice link can be maintained even under poor **channel**
    conditions .
        DESCRIPTION OF DRAWING(S) - The figure shows the receiver block
    diagram.
        Voice decoder (706)
        Channel   state estimator (710)
        pp; 18 DwgNo 7/9
Title Terms: VOICE; COMMUNICATE; SYSTEM; MOBILE; COMMUNICATE; APPLY; VOICE;
    DECODE; DECODE; RECEIVE; SIGNAL; BASED; SIGNAL; OUTPUT; CHANNEL; STATE;
    ESTIMATE
Derwent Class: W01; W02
International Patent Class (Main): H04L-027/00
File Segment: EPI
Manual Codes (EPI/S-X): W01-A03B; W01-A06G2; W01-A09; W01-B05A1A;
    W02-C03C1A

 43/9/20   (Item 20 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

013397158   **Image available**
WPI Acc No: 2000-569096/200053
XRPX Acc No: N00-420628
   Orthogonal frequency division multiplex apparatus for digital mobile
   communication, judges subcarrier corresponding to signal, by comparing
   signal level with maximum threshold of signal level
Patent Assignee: MATSUSHITA DENKI SANGYO KK (MATU)
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
JP 2000224140 A   20000811 JP 9925850   A   19990203 200053 B

Priority Applications (No Type Date): JP 9925850 A 19990203

Patent Details:
Patent No   Kind Lan Pg   Main IPC   Filing Notes
JP 2000224140 A   15 H04J-011/00

Abstract (Basic): JP 2000224140 A
        NOVELTY - A detector (119) detects level of signal assigned to each
    sub-carrier. A decision unit (117) judges the sub-carrier corresponding
    to the signal, by comparing the signal level with maximum threshold of
    signal   level . A **modification** unit **varies** the **threshold   value**
    adaptively, **based** on **circuit   quality** assessed value for every
    unit burst.
        USE - For digital mobile communication.
        ADVANTAGE - As the threshold value used for choosing the
    sub-carrier is changed **depending** on **circuit   quality** , reliability
    of re-sending efficiency and demodulation signal is attained.
        DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of
    orthogonal frequency division multiplex apparatus.
        Decision unit (117)
        Detector (119)
        pp; 15 DwgNo 1/13
Title Terms: ORTHOGONAL; FREQUENCY; DIVIDE; MULTIPLEX; APPARATUS; DIGITAL;
  MOBILE; COMMUNICATE; JUDGEMENT; SUBCARRIER; CORRESPOND; SIGNAL; COMPARE;
  SIGNAL; LEVEL; MAXIMUM; THRESHOLD; SIGNAL; LEVEL
Derwent Class: W01; W02
International Patent Class (Main): H04J-011/00
International Patent Class (Additional): **H04L-001/16**
File Segment: EPI
Manual Codes (EPI/S-X): W01-A01A; W02-K07

 43/9/21   (Item 21 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2004 Thomson Derwent. All rts. reserv.

013338299   **Image available**
WPI Acc No: 2000-510238/200046
XRPX Acc No: N00-377856
  **Hot standby circuit switching system for digital wireless communication,
  transmits dummy frame signal instead of transmission signal to opposing
  station when input signal is frame synchronization detachment type**
Patent Assignee: NEC CORP (NIDE   )
Number of Countries: 001 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2000196505	A	20000714	JP 98370879	A	19981225	200046	B
JP 3351373	B2	20021125	JP 98370879	A	19981225	200301	

Priority Applications (No Type Date): JP 98370879 A 19981225
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2000196505	A		7	H04B-001/74	
JP 3351373	B2		7	H04B-001/74	Previous Publ. patent JP 2000196505

Abstract (Basic): JP 2000196505 A
        NOVELTY - A generator (306) generates dummy frame signal containing
    decision information **relating** to **circuit** degradation **condition** . A
    judging **circuit** judges degradation cause of input signal, based on
    natural phenomenon. A selecting circuit (307) selectively transmits
    dummy frame signal in replacement with transmission signal, to opposing
    terminal station when input signal is a frame synchronization

detachment type.

DETAILED DESCRIPTION - One or more reproduction repeaters are provided between terminal stations. The repeater judges the **circuit** degradation **condition** **based** on input signal condition.

USE - In digital wireless communication.

ADVANTAGE - Enables judgment of degradation of circuit quality by natural phenomenon by the terminal station and hence unnecessary circuit switching need not be performed. Increases maintenance efficiency of circuit by communication manufacturers by simplified identification of circuit quality degradation.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of demodulation **signal** processor of **reproduction** **repeater** and modulating **signal** processor.

Generator (306)

Selecting circuit (307)

pp; 7 DwgNo 2/6

Title Terms: HOT; STANDBY; CIRCUIT; SWITCH; SYSTEM; DIGITAL; WIRELESS; COMMUNICATE; TRANSMIT; DUMMY; FRAME; SIGNAL; INSTEAD; TRANSMISSION; SIGNAL; OPPOSED; STATION; INPUT; SIGNAL; FRAME; SYNCHRONISATION; DETACH; TYPE

Derwent Class: W01

International Patent Class (Main): H04B-001/74

International Patent Class (Additional): **H04L-001/22** ; H04M-003/22; H04M-003/26

File Segment: EPI

Manual Codes (EPI/S-X): W01-A06A2; W01-C02A1; W01-C02A5

43/9/23   **(Item 23 from file: 350)**

DIALOG(R)File 350:Derwent WPIX

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012836059   **Image available**

WPI Acc No: 2000-007891/200001

XRPX Acc No: N00-007120

Optical measuring apparatus for monitoring of optical transmission line - analyzes condition detecting signal and computes its relative value

Patent Assignee: ANDO ELECTRIC CO LTD (ANDN)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 11287740	A	19991019	JP 98103332	A	19980331	200001	B

Priority Applications (No Type Date): JP 98103332 A 19980331

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 11287740	A		9	G01M-011/02	

Abstract (Basic): JP 11287740 A

NOVELTY - An analysis **circuit** analyzes a **condition** detecting signal caused **depending** on condition of passage of a measurement signal through a transmission **line** , and computes condition detecting **signal** relative **value** . An **adjustment** circuit (16) controls the analysis circuit and **adjusts** the **condition** detecting **signal** suitably. An output unit outputs analysis result of the analysis circuit. DETAILED DESCRIPTION - A signal generator outputs a measurement signal to a transmission line.

USE - For measuring variation of the output level of light pulse or wavelength, passing through optical transmission line.

ADVANTAGE - Prevents that S/N ratio becomes bad and transmission

line is measured correctly. Prevents damage of APD. DESCRIPTION OF
DRAWING(S) - The figure shows the block diagram showing component of
optical measuring apparatus. (16) Adjustment circuit.
        Dwg.1/4
Title Terms: OPTICAL; MEASURE; APPARATUS; MONITOR; OPTICAL; TRANSMISSION;
    LINE; CONDITION; DETECT; SIGNAL; COMPUTATION; RELATIVE; VALUE
Derwent Class: S02
International Patent Class (Main): G01M-011/02
File Segment: EPI
Manual Codes (EPI/S-X): S02-J04A1
? t43/9/28

 43/9/28   (Item 28 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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010762424   **Image available**
WPI Acc No: 1996-259379/199626
XRPX Acc No: N96-218264
    Signal   reconstruction **method for deriving primary output signal from
    several secondary signals - filtering second input signal and combining
    with first input signal to derive intermediate signal and then processing
    intermediate signal through second filter**
Patent Assignee: LOCKHEED MISSILES & SPACE CO INC (LOCK)
Inventor: RICE B F; WILHOYTE M E
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
US 5519735   A   19960521 US 94234231   A   19940428 199626 B

Priority Applications (No Type Date): US 94234231 A 19940428
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
US 5519735   A   20 H04B-007/12

Abstract (Basic): US 5519735 A
        The **signal   reconstruction** method involves first receiving two
    separate input signals, pref. receiving two frequency ranges of a
    transmitted signal in order to capture the entire bandwidth. The second
    input signal is processed by a filter with a given set of parameters
    and then combined with the first input signal to derive an intermediate
    output signal. The intermediate signal is processed by a second filter
    to derive the output signal.
        The second processing step consists of deriving a set of orthogonal
    parallel filtered signal components, pref. using a lattice filter, from
    the intermediate output signal, and processing them in parallel. The
    primary output can be used to determine an error component and the
    respective filter parameters are adjusted to reduce this error. Pref.
    the received signals are sampled and converted to digital signals. One
    of the digital input signals is then time delayed relative to the other
    to introduce a selected frequency difference between the two signals.
        ADVANTAGE - Capable of tolerating variable time delays, frequency
    offsets (up to 0.01% of baud rate) and variable overlaps. Lattice
    filter provides faster data convergence therefore allowing rapid
    tracking of **changes** in **channel   conditions** .
        Dwg.8/12
Title Terms: SIGNAL; RECONSTRUCT; METHOD; DERIVATIVE; PRIMARY; OUTPUT;
    SIGNAL; SECONDARY; SIGNAL; FILTER; SECOND; INPUT; SIGNAL; COMBINATION;
    FIRST; INPUT; SIGNAL; DERIVATIVE; INTERMEDIATE; SIGNAL; PROCESS;
    INTERMEDIATE; SIGNAL; THROUGH; SECOND; FILTER
Index Terms/Additional Words: **ADAPTIVE** ; MULTICHANNEL

Derwent Class: U22; W01; W02
International Patent Class (Main): H04B-007/12
International Patent Class (Additional): **H04L-001/02**
File Segment: EPI
Manual Codes (EPI/S-X): U22-G01A5; U22-G01D; W01-A01A; W02-C03A3; W02-C03A9
  ; W02-G03B9
?
PLEASE ENTER A COMMAND OR BE LOGGED OFF IN 5 MINUTES
? t43/9/36,41,44-45,48

43/9/36   (Item 36 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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009306545   **Image available**
WPI Acc No: 1992-433954/199252
XRPX Acc No: N92-331160
  Mobile radio system using e.g. quadrature amplitude modulation - uses
  transceivers to assess quality of link and modify signal
  constellation and includes QPSK signal indicating which constellation has
  been used
Patent Assignee: BRITISH TELECOM PLC (BRTE)
Inventor: WEBB W T
Number of Countries: 037 Number of Patents: 012
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9222162	A1	19921210	WO 92GB988	A	19920602	199252	B
AU 9217724	A	19930108	AU 9217724	A	19920602	199315	
			WO 92GB988	A	19920602		
EP 587620	A1	19940323	EP 92910845	A	19920602	199412	
			WO 92GB988	A	19920602		
JP 6507763	W	19940901	JP 92509872	A	19920602	199439	
			WO 92GB988	A	19920602		
AU 656972	B	19950223	AU 9217724	A	19920602	199515	
EP 587620	B1	19980107	EP 92910845	A	19920602	199806	
			WO 92GB988	A	19920602		
DE 69223961	E	19980212	DE 623961	A	19920602	199812	
			EP 92910845	A	19920602		
			WO 92GB988	A	19920602		
ES 2112318	T3	19980401	EP 92910845	A	19920602	199819	
SG 47627	A1	19980417	SG 963264	A	19920602	199826	
US 5828695	A	19981027	WO 92GB988	A	19920602	199850	
			US 94162016	A	19940218		
CA 2110578	C	19990427	CA 2110578	A	19920602	199935	
			WO 92GB988	A	19920602		
JP 3193378	B2	20010730	JP 92509872	A	19920602	200146	
			WO 92GB988	A	19920602		

Priority Applications (No Type Date): GB 9114556 A 19910705; GB 9111856 A
  19910603
Cited Patents: 2.Jnl.Ref; US 4495619; US 4956851
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
WO 9222162   A1 E   25 H04L-027/34
    Designated States (National): AU BB BG BR CA CS FI GB HU JP KP KR LK MG
    MW NO PL RO RU SD US
    Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LU MC NL OA
    SE
AU 9217724   A   H04L-027/34   Based on patent WO 9222162
EP 587620   A1 E 2 H04L-027/34   Based on patent WO 9222162
    Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU MC NL

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       SE
JP 6507763      W          H04B-007/26    Based on patent WO 9222162
AU 656972       B          H04L-027/34    Previous Publ. patent AU 9217724
                                          Based on patent WO 9222162
EP 587620       B1 E    14 H04L-027/34    Based on patent WO 9222162
       Designated States (Regional): AT BE CH DE DK ES FR GB GR IT LI LU MC NL
       SE
DE 69223961     E          H04L-027/34    Based on patent EP 587620
                                          Based on patent WO 9222162
ES 2112318      T3         H04L-027/34    Based on patent EP 587620
SG 47627        A1         H04L-027/34
US 5828695      A          H04B-001/38    Based on patent WO 9222162
CA 2110578      C  E       H04L-027/34    Based on patent WO 9222162
JP 3193378      B2      11 H04B-007/26    Previous Publ. patent JP 6507763
                                          Based on patent WO 9222162
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Abstract (Basic): WO 9222162 A
      The system comprises a pair of stations having transceivers which
   receive signals from the other station and assess the received signals.
   A circuit selects a transmission modulation state on the basis of the
   assessment. A radio transmitter sends signals to the other station
   using a modulation scheme having a number of modulation states.
      A circuit adjusts the transmitting state of the trnsmitter to be
   the selected modulation **state** . A signalling **circuit** includes in the
   signals to be transmitted to the other station an indication of the
   selected modulation state.
      ADVANTAGE - Transmissions **adapted** to transmission **conditions**
   to e.g. reduce problem of fast fading. Provides near constant BER over
   wide range of channel SNRs. Suitable for data services.
      Dwg.3/9
Abstract (Equivalent): EP 587620 B
      The system comprises a pair of stations having transceivers which
   receive signals from the other station and assess the received signals.
   A circuit selects a transmission modulation state on the basis of the
   assessment. A radio transmitter sends signals to the other station
   using a modulation scheme having a number of modulation states.
      A circuit adjusts the transmitting state of the trnsmitter to be
   the selected modulation **state** . A signalling **circuit** includes in the
   signals to be transmitted to the other station an indication of the
   selected modulation state.
      ADVANTAGE - Transmissions **adapted** to transmission **conditions**
   to e.g. reduce problem of fast fading. Provides near constant BER over
   wide range of channel SNRs. Suitable for data services.
      Dwg.1/9

Title Terms: MOBILE; RADIO; SYSTEM; QUADRATURE; AMPLITUDE; MODULATE;
  TRANSCEIVER; ASSESS; QUALITY; LINK; MODIFIED; SIGNAL; QPSK; SIGNAL;
  INDICATE
Derwent Class: W01; W02
International Patent Class (Main): H04B-001/38; H04B-007/26; H04L-027/34
International Patent Class (Additional): H04B-001/40; **H04L-001/16**
File Segment: EPI
Manual Codes (EPI/S-X): W01-A09C; W01-A09E; W02-C03C3C; W02-C03C3E;
  W02-G02A2

43/9/41   (Item 41 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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004398065
WPI Acc No: 1985-224943/198537

  **Modem for transmitting digital signals over telephone lines - has quality
  monitor and rate control for adapting communication rate to line quality**
Patent Assignee: CODEX CORP (RENI   )
Inventor: QURESHI S U H; SEITZ K W; WILSON R M
Number of Countries: 013 Number of Patents: 006
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 154565	A	19850911	EP 85301614	A	19850308	198537	B
JP 61001130	A	19860107	JP 8546315	A	19850308	198607	
US 4756007	A	19880705	US 84587386	A	19840308	198829	
CA 1253229	A	19890425				198921	
EP 154565	B	19910925				199139	
DE 3584176	G	19911031				199145	

Priority Applications (No Type Date): US 84587386 A 19840308
Cited Patents: 2.Jnl.Ref; A3...8728; EP 39191; JP 59023639; No-SR.Pub; US
  3536840; US 3665394
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 154565	A	E	32		

    Designated States (Regional): AT BE CH DE FR GB IT LI NL SE

Patent No	Kind
EP 154565	B

    Designated States (Regional): AT BE CH DE FR GB IT LI NL SE

Abstract (Basic): EP 154565 A
    A modem has a device to transmit information signals to a remote
device over a channel at any one of a number of communication rates. A
device receives information signals from the remote device, and a
circuit monitors the quality of the channel on the basis of the
received information signals. A rate control selects a current
communication rate **based** on the **channel   quality** . The control has
a fall forward circuit adapted to indicate that an increase in the
current communication rate is desired, and to implement the increase
when the remote device concurs.
    The rate control may also have a fall back circuit for making fall
back decisions which unilaterally decrease the current communication
rate. The receiver may also include adaptive equalisation and
demodulation circuitry for equalising and demodulating the received
information signals. The rate control may have a save equaliser circuit
responsive to the quality monitor to update the values when the channel
quality is good and for reinitialising the values when the channel
quality is poor.
    ADVANTAGE - Modem has ability to adapt data signalling rate to
line quality.
    Dwg.5/6
Abstract (Equivalent): EP 154565 B
    A modem comprising; transmission means **adapted** to transmit
information **signals** to a remote device over a channel at any one of a
multiplicity of transmission rates, reception means **adapted** to
receive information **signals** from said remote device over said channel
at any one of a multiplicity of reception rates, quality-monitoring
means adapted to monitor the **quality** of said **channel** on the basis
of said received information signals, and rate control means adapted to
selected a current reception rate **based** on **channel   quality** ; said
modem being characterised in that said rate control means comprises
fall forward means adapted to indicate to said remote device that an
increase in said current reception rate to a higher reception rate is
desired, **based** on said **channel   quality** as perceived by said
quality-monitoring means and to implement said increase only when said

remote device indicates its concurrence in implicating said increase, based upon said remote device's own analysis of said channel quality. (18pp)

Abstract (Equivalent): US 4756007 A
    The modem includes a transmitter for sending information signals to a remote device over a channel at any one of a multiplicity of communication rates. Information signals are received from the remote device over the channel. The quality of the channel is monitored on the basis of the received information signals. A rate controller responsive to the quality-monitor selects a current communication rate **based** on the **channel quality** .. The rate controller includes a fall forward device for indicating that an increase in the current communication rate to a higher value is desired and for implementing the increase when the remote device concurs.
    USE - For transmission over band-wanted channels, e.g. telephone lines. (13pp
Title Terms: MODEM; TRANSMIT; DIGITAL; SIGNAL; TELEPHONE; LINE; QUALITY; MONITOR; RATE; CONTROL; ADAPT; COMMUNICATE; RATE; LINE; QUALITY
Derwent Class: W01
International Patent Class (Additional): **H04L-001/12** ; H04L-027/00
File Segment: EPI
Manual Codes (EPI/S-X): **W01-A01** ; W01-A09; W01-C05B

43/9/44   (Item 44 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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001680747
WPI Acc No: 1977-B7218Y/197709
  Centrally controlled telephone exchange has condition lines - whose monitored states change between free, actuated and engaged
Patent Assignee: SIEMENS-ALBIS AG (SIEI   )
Number of Countries: 003 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 2624402	B	19770224				197709	B
ZA 7605034	A	19770704				197738	
CH 612052	A	19790629				197929	

Priority Applications (No Type Date): CH 7511986 A 19750916

Abstract (Basic): DE 2624402 B
    The centrally controlled telephone exchange produces control **signals** in response to **changes** in subscriber **line condition** . A certain number of subscribers within a group have actuating lines of a first type that change state from free to actuated and lines of a second type that change state from engaged to free. Both types of line lead from the subscribers' loop circuits.
    An indicator detects the changes in states on these two types of line. The lines are connected in turn by a selection circuit to the indicator. Requests for various actions are then passed to the central control from the indicator **depending** on **line state** .
Title Terms: CENTRAL; CONTROL; TELEPHONE; EXCHANGE; CONDITION; LINE; MONITOR; STATE; CHANGE; FREE; ACTUATE; ENGAGE
Derwent Class: W01; W02
International Patent Class (Additional): H04G-000/00; H04M-003/12; H04Q-003/28
File Segment: EPI

DIALOG(R)File 350:Derwent WPIX
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001546884
WPI Acc No: 1976-L9831X/197651
  Line condition change **detector for telephone exchange - has decaying
  acoustic signal supplied to subscribers circuit at operator board**
Patent Assignee: DEUT TELEPHONWERKE & KABELIND (DETK)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 2108306	B	19761208				197651	B

Priority Applications (No Type Date): DE 2108306 A 19710218

Abstract (Basic): DE 2108306 B
      The **line condition change** detector, for telephone exchanges,
  releases an acoustic signal at the operator's board when **line
  condition changes** . The **acoustic signal** is generated by a diode
  (D) and a capacitor (C1) acting as switch. The drop in the acoustic
  signal is caused by the discharge of the capacitor. The discharge of
  the capacitor can be set by a variable resistor (R5). The acoustic
  signal, whose volume decreases with time, is coupled to the operator
  board's subscriber line. The reduction in volume with time allows
  several such acoustic signals to be distinguished from one another.
Title Terms: LINE; CONDITION; CHANGE; DETECT; TELEPHONE; EXCHANGE; DECAY;
  ACOUSTIC; SIGNAL; SUPPLY; SUBSCRIBER; CIRCUIT; OPERATE; BOARD
Derwent Class: W01
International Patent Class (Additional): H04M-003/22; H04Q-001/20
File Segment: EPI

DIALOG(R)File 347:JAPIO
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05618218   **Image available**
VOICE QUALITY WARNING SYSTEM FOR DIGITAL PORTABLE TELEPHONE SYSTEM

PUB. NO.:   09-233018 [JP 9233018 A]
PUBLISHED: September 05, 1997 (19970905)
INVENTOR(s): SHIONO KATSUMI
              ONO SHIGERU
APPLICANT(s): SAITAMA NIPPON DENKI KK [000000] (A Japanese Company or
              Corporation), JP (Japan)
              NEC CORP [000423] (A Japanese Company or Corporation), JP
              (Japan)
APPL. NO.:   08-041127 [JP 9641127]
FILED: February 28, 1996 (19960228)
INTL CLASS: [6] H04B-007/26; H04B-014/06; **H04L-001/00**
JAPIO CLASS: 44.2 (COMMUNICATION -- Transmission Systems); 44.3
              (COMMUNICATION -- Telegraphy); 44.4 (COMMUNICATION --
              Telephone); 46.2 (INSTRUMENTATION -- Testing)

ABSTRACT
PROBLEM TO BE SOLVED: To allow the digital portable telephone system to
provide the output of quality deterioration warning information in response
to the degree of deterioration in a **reproduced** voice **signal** by taking

correlation between deterioration in **channel** and voice **quality** .

SOLUTION: A decoding section 22 of a digital signal processor(DSP) conducts decoding error correction processing of coded voice data and when a CRC cyclic redundancy check error detector 22-6 detects it that voice data has an error, a bad frame masking processing section 22-10 conducts processing of preventing deterioration in voice quality. A warning tone decision processing section 61 of a main CPU accumulates consecutive frames of voice data by a prescribed number of frames while shifting a status number of bad frame masking one by one frame each, decides the propriety of the output of warning information depending on the accumulated sum and controls a warning tone output device 31 to outputs a warning tone when the section 61 decides its propriety of output
? t43/9/58

43/9/58   (Item 58 from file: 347)

ABSTRACT
PURPOSE: To provide a **circuit   quality** monitoring function, by supplying a control signal to an automatic equalizer in a digital transmission circuit, and thus causing frequency amplitude distortion or inter-code interference on a transmission line, and only providing a simple additional circuit.

CONSTITUTION: For a 16QAM (orthogonal phase amplitude modulation) system, a signal from a transmitter 1 is inputted to an automatic equalizer 3 through a space diversity circuit 2 for compensating the multipath fading. The equalizer 3 compensates frequency amplitude distortion or compensates inter-code interference by the time axis to send the resulting signal to a demodulator 4. When the initial value of the frequency amplitude distortion is supplied to the equalizer 3 by a **circuit   quality** monitoring control signal E_s, the code error rate of the demodulated signal is detected by a code error detecting circuit 100. When the initial **value** is **varied** by the **signal** E_s and the amplitude distortion is generated by the equalizer 3, the amplitude distortion due to the multipath fading is compensated by the automatic equalizer, and the amplitude distortion amount of the system includes only deviation in initial set value, so that a test is accurately performed.